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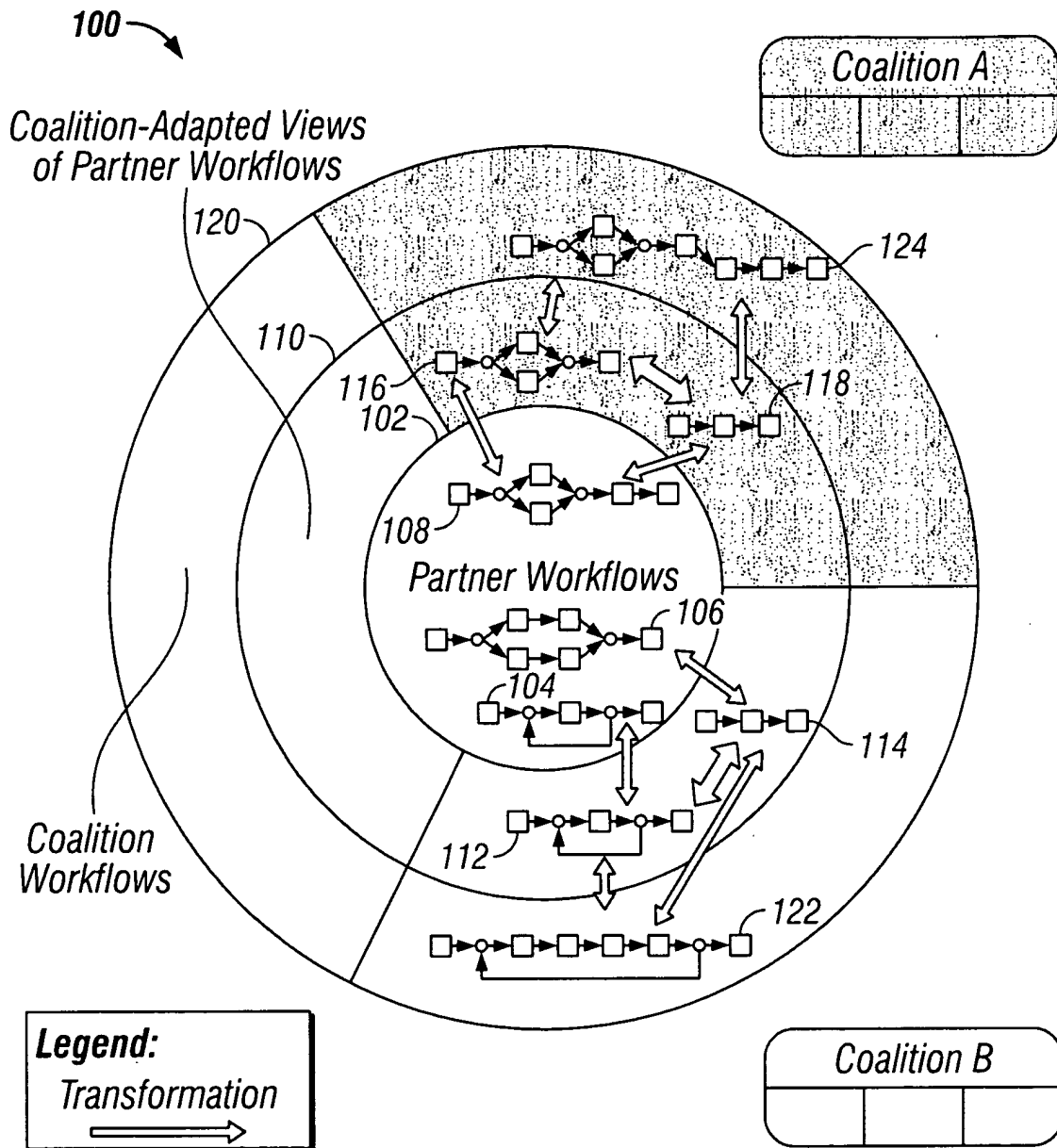


FIG. 1

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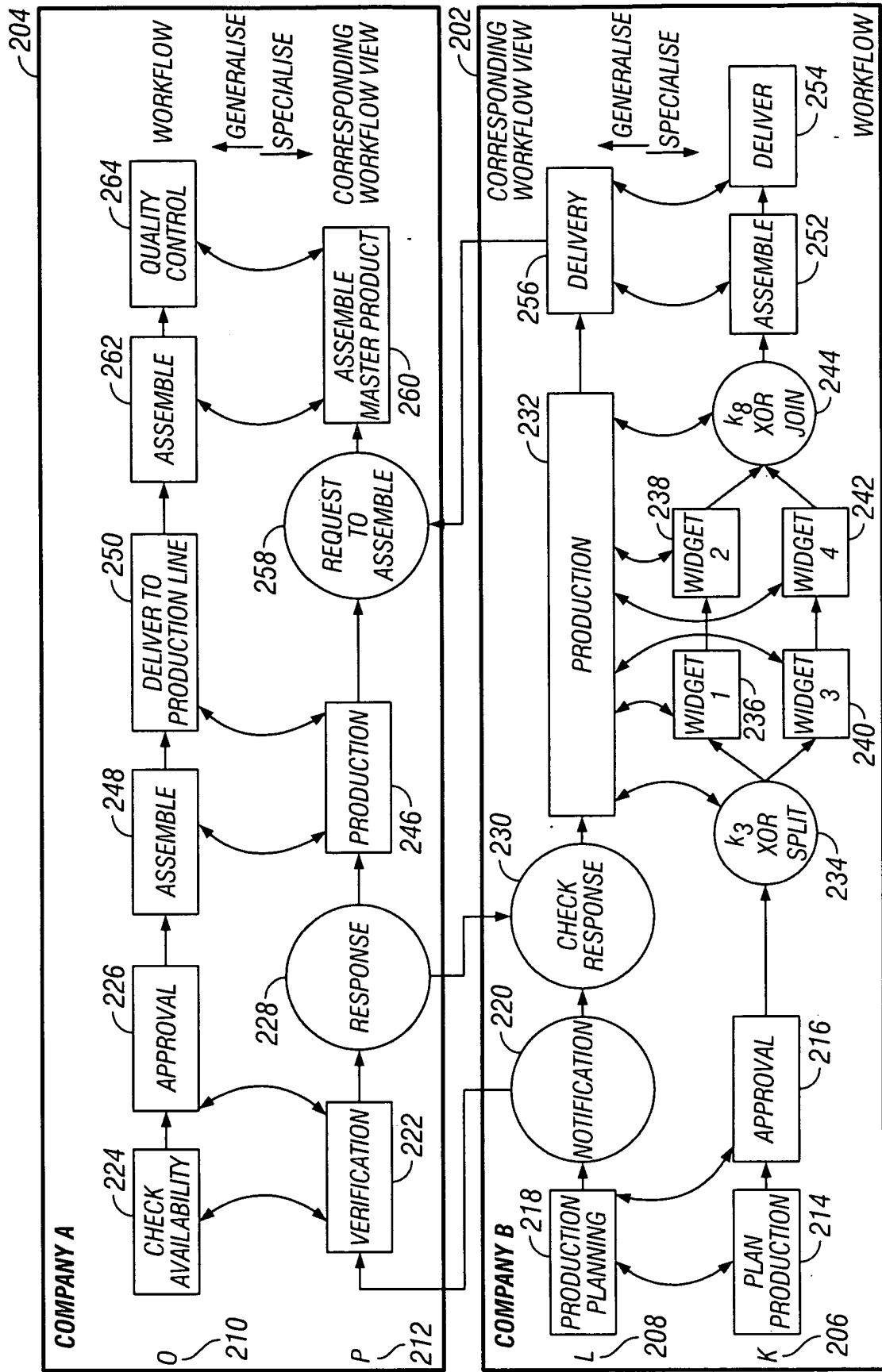
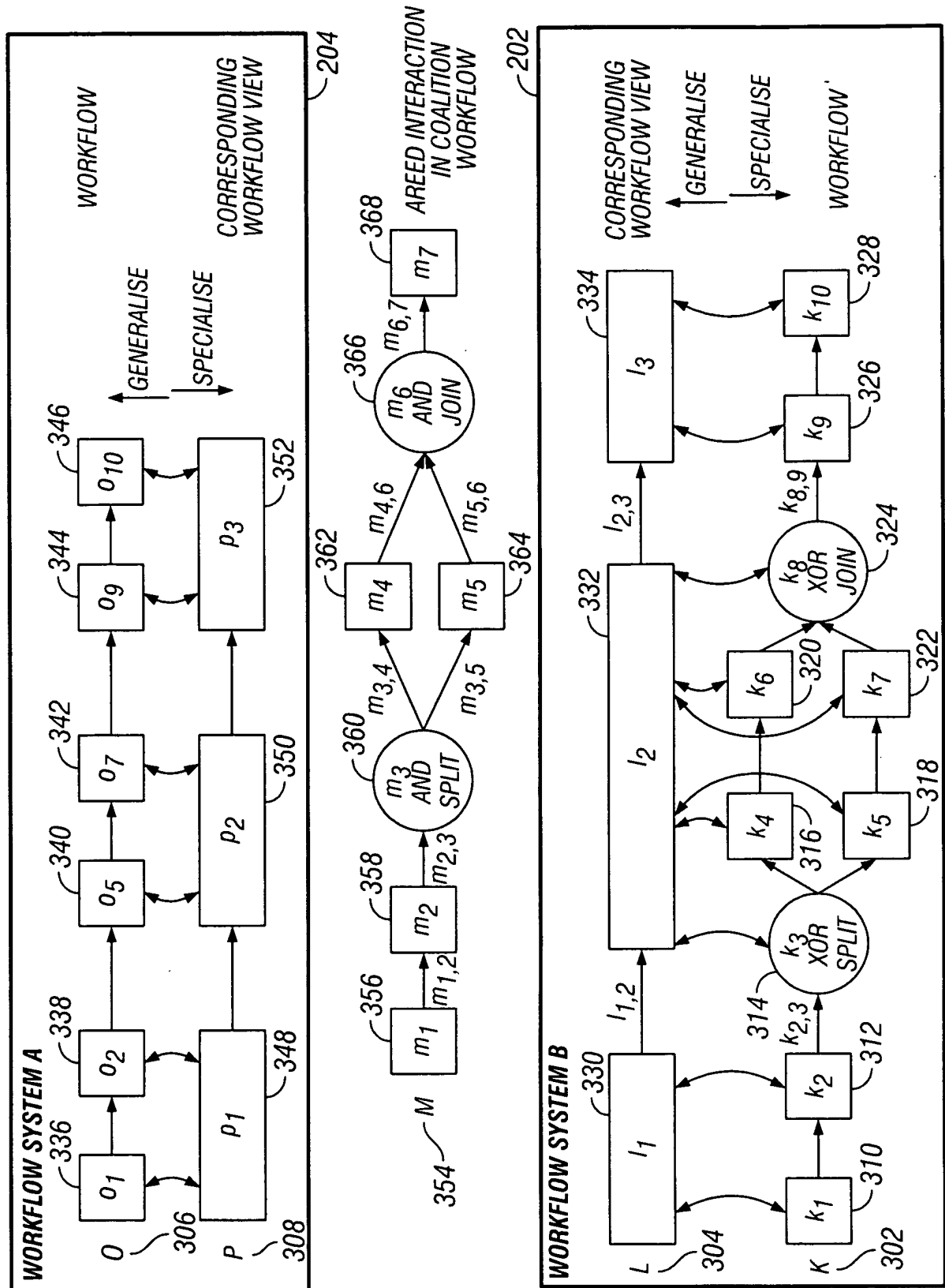


FIG. 2

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FIG. 3



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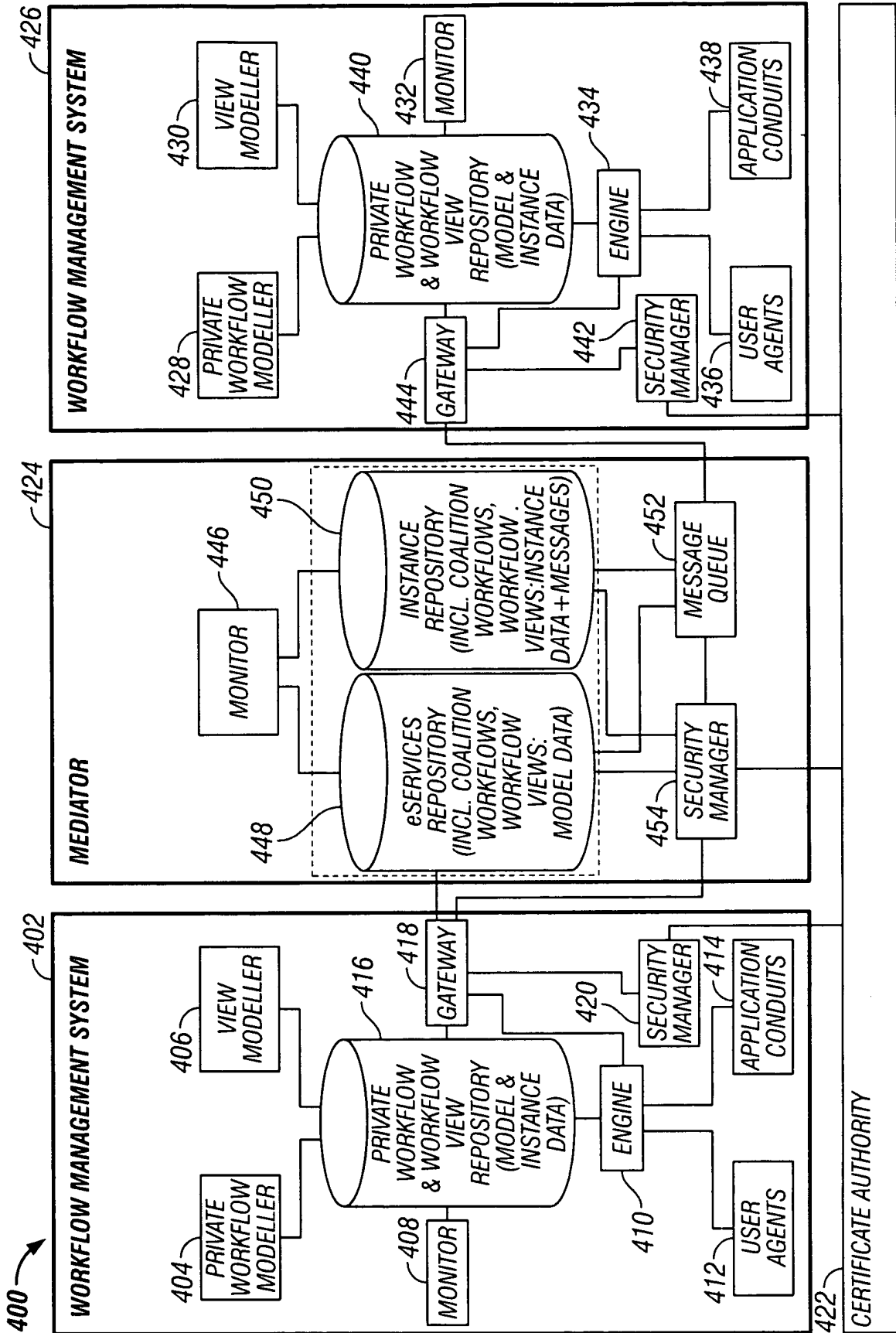


FIG. 4

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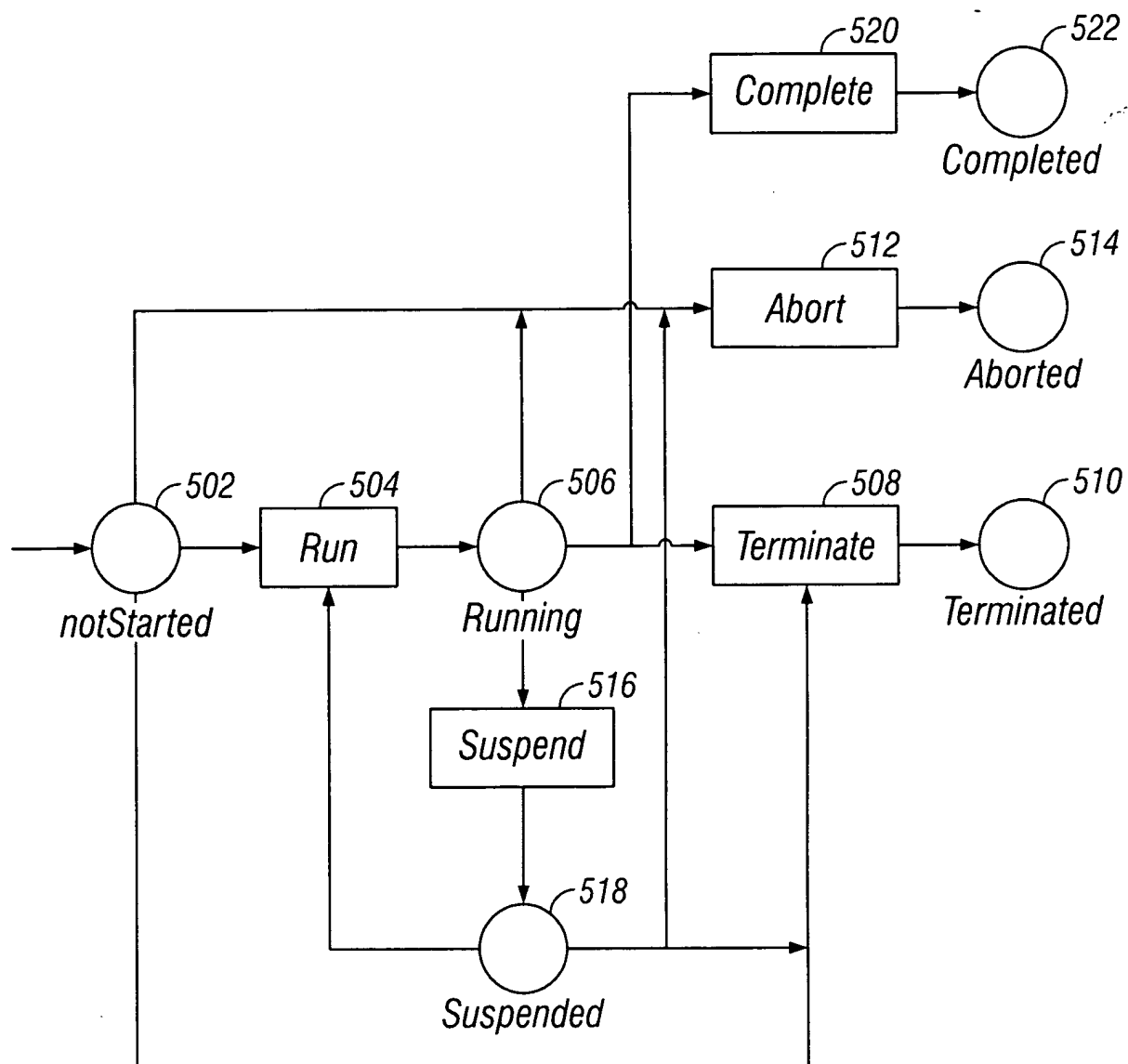


FIG. 5

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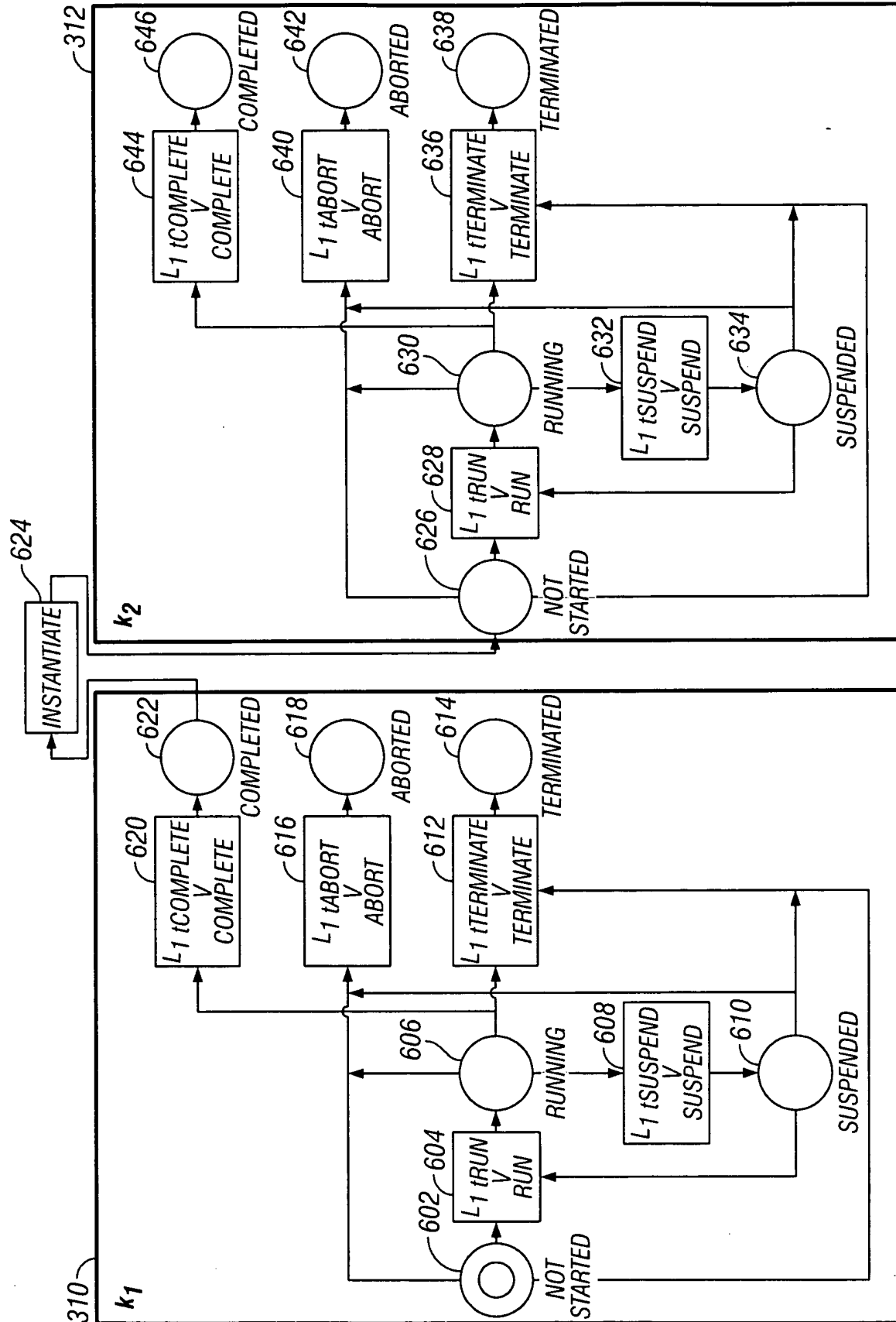
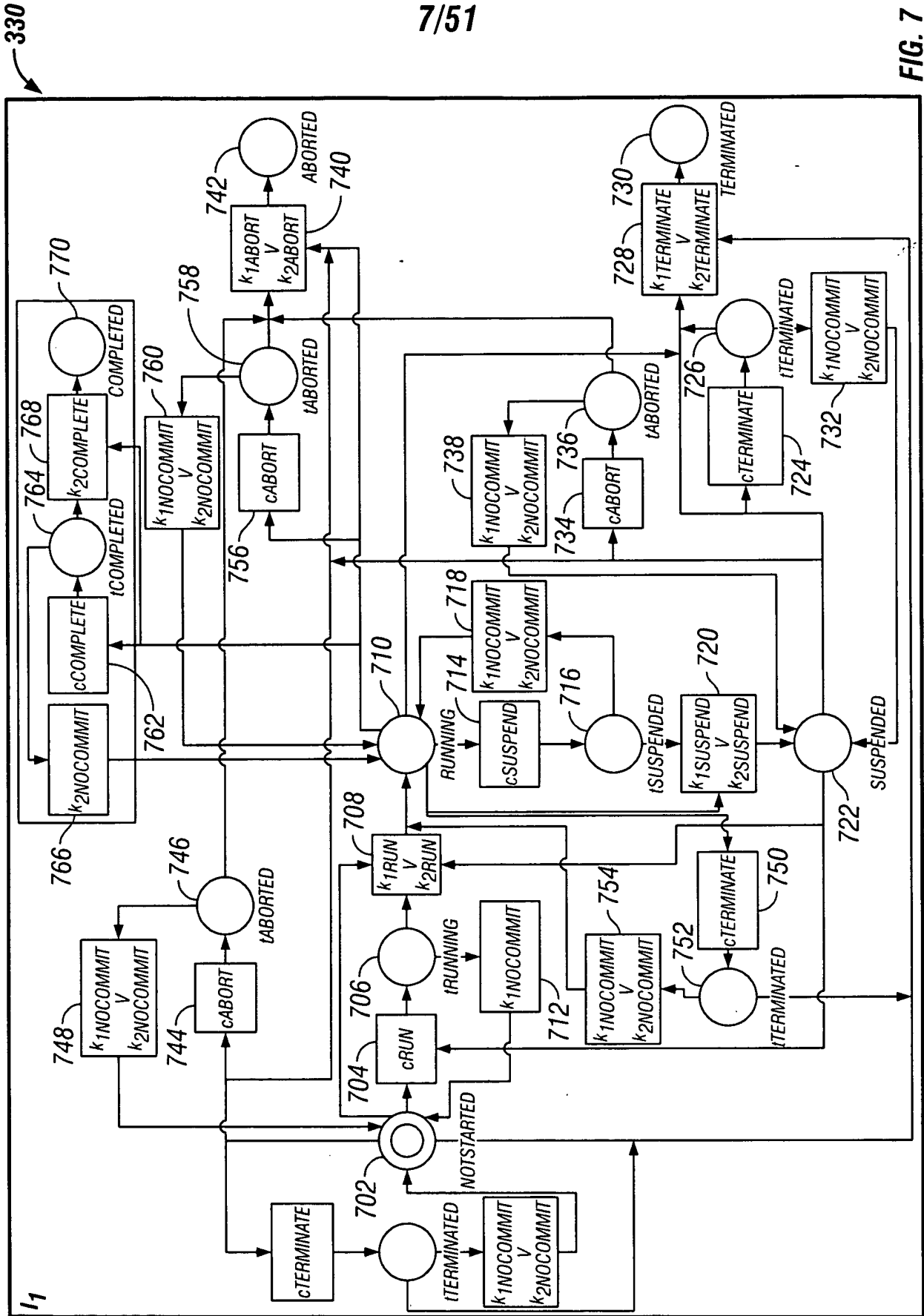


FIG. 6

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FIG. 7



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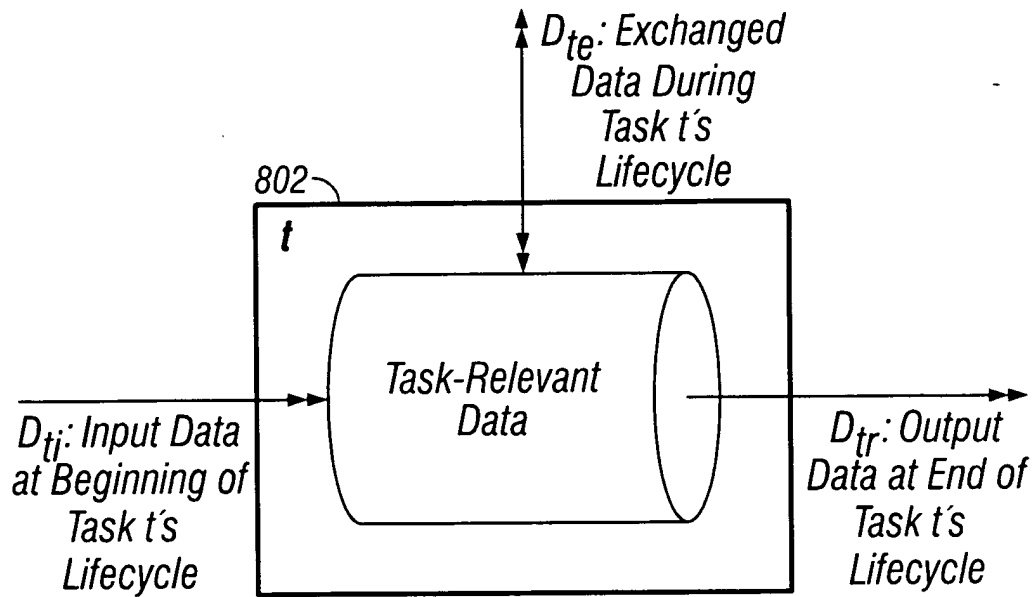


FIG. 8

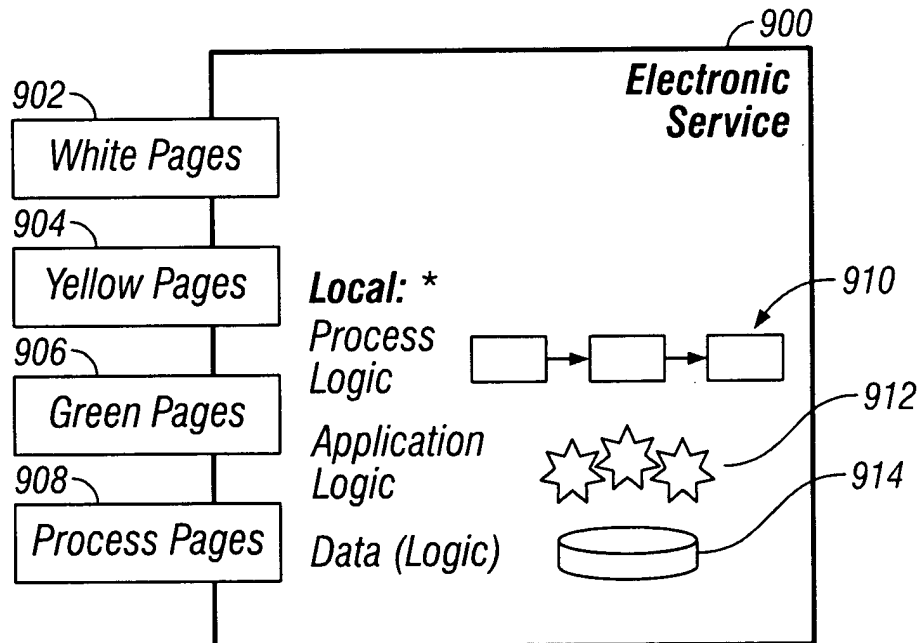


FIG. 9

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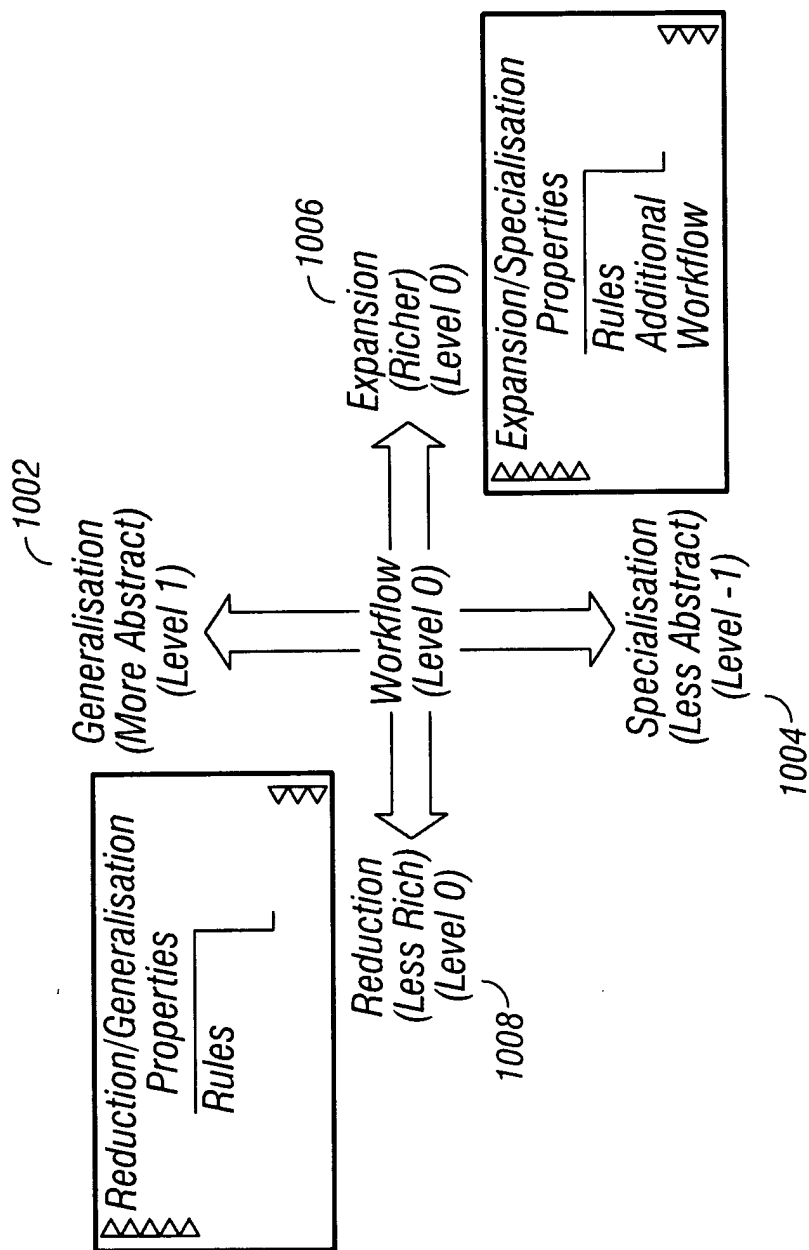


FIG. 10

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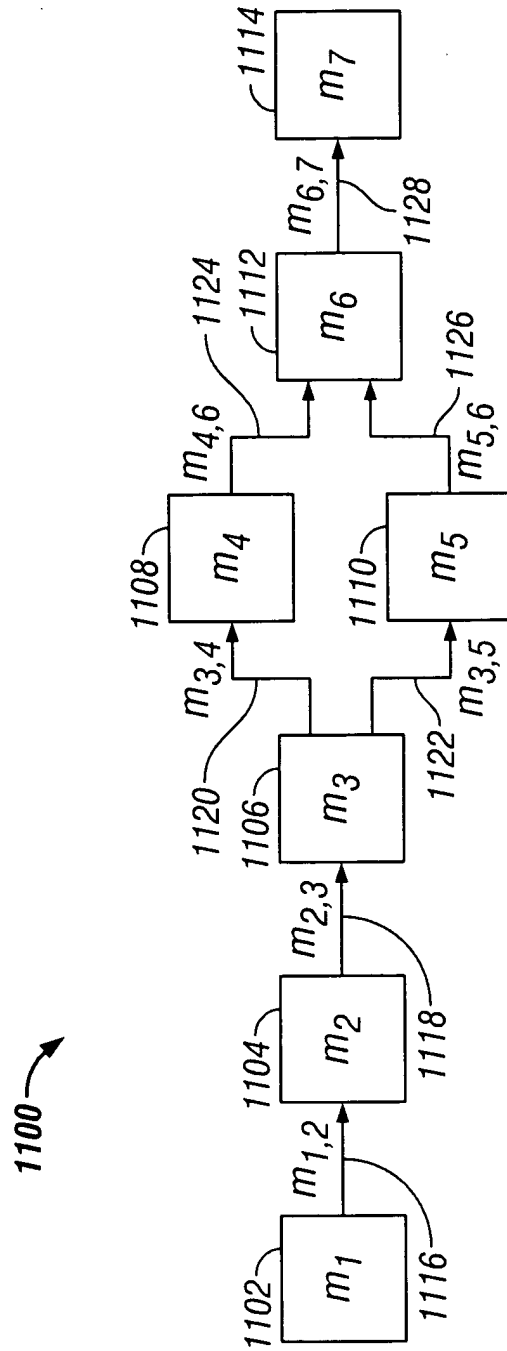


FIG. 11

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Row-Index (i)		Column-Index (j) 1202					1204				
		1	2	...	l	l+1	...	l+n-1	l+n	...	r
1	①	$m_{1,1}$	$m_{1,2}$	$m_{1,...}$	$m_{1,l}$	0	0	0	$m_{1,l+1}$	$m_{1,...}$	$m_{1,m}$
2		$m_{2,1}$	$m_{2,2}$	$m_{2,...}$	$m_{2,l}$	0	0	0	$m_{2,l+1}$	$m_{2,...}$	$m_{2,m}$
⋮		$m_{...,1}$	$m_{...,2}$	$m_{...,...}$	$m_{...,l}$	0	0	0	$m_{...,l+1}$	$m_{...,...}$	$m_{...,m}$
l	⑤	0	0	0	$n_{1,1}$	$n_{1,2}$	$n_{1,...}$	$n_{1,n}$	0	0	0
l+1		0	0	0	$n_{2,1}$	$n_{2,2}$	$n_{2,...}$	$n_{2,n}$	0	0	0
⋮		0	0	0	$n_{...,1}$	$n_{...,2}$	$n_{...,...}$	$n_{...,n}$	0	0	0
l+n-1		$m_{l,1}$	$m_{l,2}$	$m_{l,...}$	$n_{n,1}$	$n_{n,2}$	$n_{n,...}$	$n_{n,n}$	$m_{l,l+1}$	$m_{l,...}$	$m_{l,m}$
l+n	⑥	$m_{l+1,1}$	$m_{l+1,2}$	$m_{l+1,...}$	$m_{l+1,l}$	0	0	0	$m_{l+1,l+1}$	$m_{l+1,...}$	$m_{l+1,m}$
⋮		$m_{...,1}$	$m_{...,2}$	$m_{...,...}$	$m_{...,l}$	0	0	0	$m_{...,l+1}$	$m_{...,...}$	$m_{...,m}$
r-1		$m_{m-1,1}$	$m_{m-1,2}$	$m_{m-1,...}$	$m_{m-1,l}$	0	0	0	$m_{m-1,l+1}$	$m_{m-1,...}$	$m_{m-1,m}$
r	③	$m_{m,1}$	$m_{m,2}$	$m_{m,...}$	$m_{m,l}$	0	0	0	$m_{m,l+1}$	$m_{m,...}$	$m_{m,m}$

FIG. 12

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Row-Index(i) \ Column-Index (j)		1302				1306		1300	
		1	2	...	m-1	m	m+1	m+n-1	m+n
1	m _{1,1}	m _{1,2}	m _{1,...}	m _{1,l}	m _{1,m-1}	m _{1,m}	m _{1,l}	0	0
	m _{2,1}	m _{2,2}	m _{2,...}	m _{2,l}	m _{2,m-1}	m _{2,m}	m _{2,l}	0	0
	m _{...,1}	m _{...,2}	m _{...,...}	m _{...,l}	m _{...,m-1}	m _{...,m}	m _{...,l}	0	0
	m _{l,1}	m _{l,2}	m _{l,...}	m _{l,l}	m _{l,m-1}	m _{l,m}	m _{l,l}	0	0
m	m _{...,1}	m _{...,2}	m _{...,...}	m _{...,l}	m _{...,m-1}	m _{...,m}	m _{...,l}	0	0
	m _{m-1,1}	m _{m-1,2}	m _{m-1,...}	m _{m-1,l}	m _{m-1,m-1}	m _{m-1,m}	m _{m-1,l}	0	0
	m _{m,1}	m _{m,2}	m _{m,...}	m _{m,l}	m _{m,m-1}	m _{m,m}	m _{m,l}	0	0
	m _{m+1,1}	m _{m+1,2}	m _{m+1,...}	m _{m+1,l}	m _{m+1,m-1}	m _{m+1,m}	m _{m+1,l}	0	0
m+n	m _{l,1}	m _{l,2}	m _{l,...}	m _{l,l}	m _{l,m-1}	m _{l,m}	m _{l,l}	n _{1,1}	n _{1,n}
	m _{...,1}	m _{...,2}	m _{...,...}	m _{...,l}	m _{...,m-1}	m _{...,m}	m _{...,l}	n _{...,1}	n _{...,n}
	m _{m-1,1}	m _{m-1,2}	m _{m-1,...}	m _{m-1,l}	m _{m-1,m-1}	m _{m-1,m}	m _{m-1,l}	n _{m-1,1}	n _{m-1,n}
	m _{m,1}	m _{m,2}	m _{m,...}	m _{m,l}	m _{m,m-1}	m _{m,m}	m _{m,l}	n _{m,1}	n _{m,n}

1304

1308

FIG. 13

1400

Column-Index (j)		1	2	...	k-1	k	k+1	...	r
Row-Index (i)	1	1402	1	...	...	...	...	...	...
	2	1	2	...	...	...	...	...	...
1	1	$m_{1,1}$	$m_{1,2}$	...	$m_{1,k-1}$	$m_{1,k}$	$m_{1,l+1}$	...	$m_{1,m}$
2	2	$m_{2,1}$	$m_{2,2}$	...	$m_{2,k-1}$	$m_{2,k}$	$m_{2,l+1}$	...	$m_{2,m}$
...
k-1	k-1	$m_{k-1,1}$	$m_{k-1,2}$	...	$m_{k-1,k-1}$	$m_{k-1,k}$	$m_{k-1,l+1}$	...	$m_{k-1,m}$
k	6	$m_{l,1}$	$m_{l,2}$	...	$m_{l,k-1}$	0	$m_{l,l+1}$	...	$m_{l,m}$
	1412	k							
k+1	k+1	$m_{l+1,1}$	$m_{l+1,2}$...	$m_{l+1,k-1}$	$m_{l+1,k}$	$m_{l+1,l+1}$...	$m_{l+1,m}$
...
r	r	$m_{m,1}$	$m_{m,2}$...	$m_{m,k-1}$	$m_{m,k}$	$m_{m,l+1}$...	$m_{m,m}$
	3	1406							4

1408

FIG. 14

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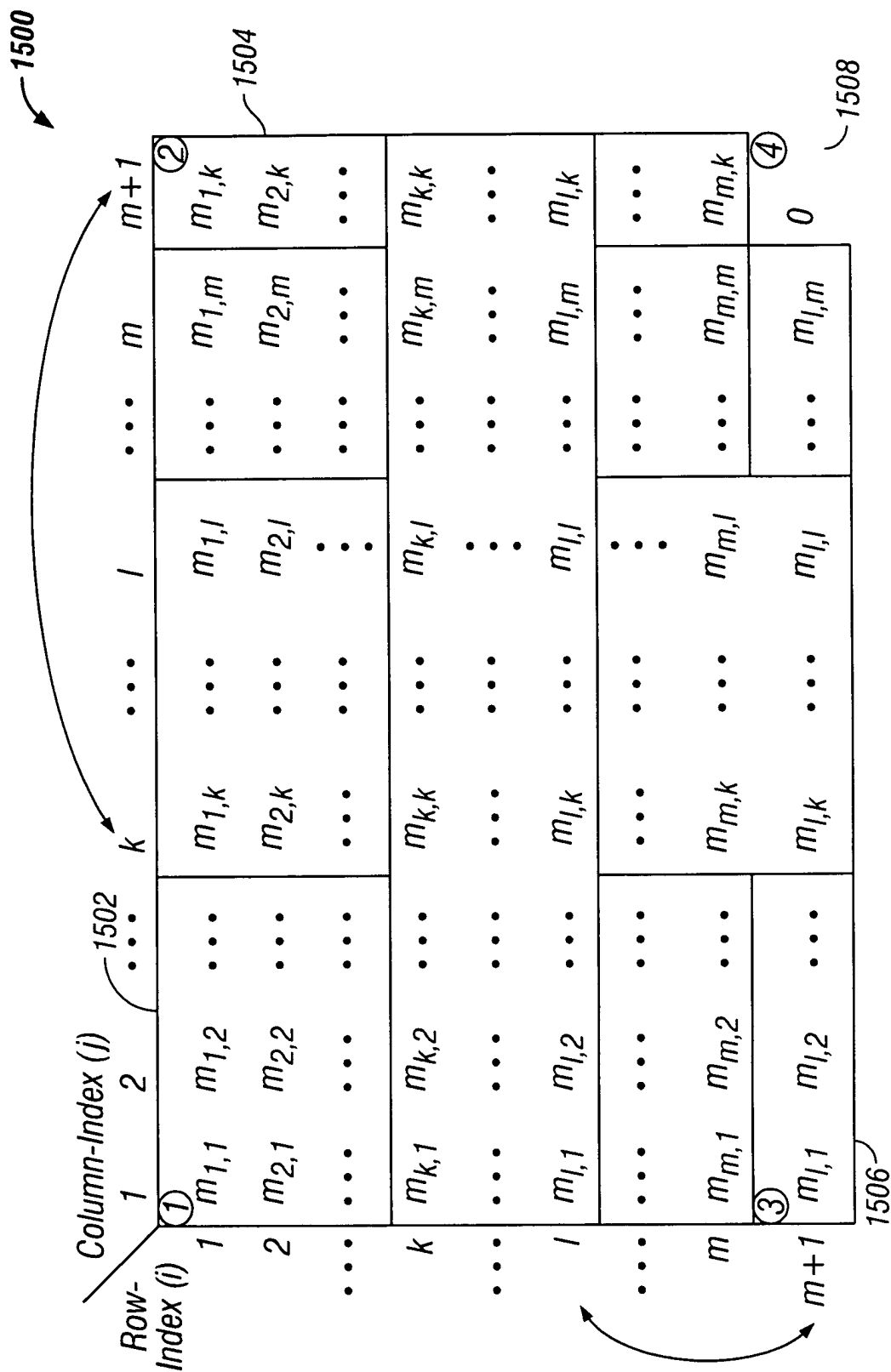


FIG. 15

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Column-Index (j)		1600			
Row-Index (i)	1	...	k-1	k	...
	1	...	k-1	k	...
1	1602
...
k-1
k
k+1
...
k+n
...
r-1
r

Column-Index (j)		1604			
Row-Index (i)	1	...	k-1	k	...
	1	...	k-1	k	...
1	1606	...	...	...	...
...
k-1
k
k+1
...
k+n
...
r-1
r

Column-Index (j)		1610			
Row-Index (i)	1	...	k-1	k	...
	1	...	k-1	k	...
1	1612	...	...	...	...
...
k-1
k
k+1
...
k+n
...
r-1
r

Column-Index (j)		1614			
Row-Index (i)	1	...	k-1	k	...
	1	...	k-1	k	...
1	1608
...
k-1
k
k+1
...
k+n
...
r-1
r

FIG. 16

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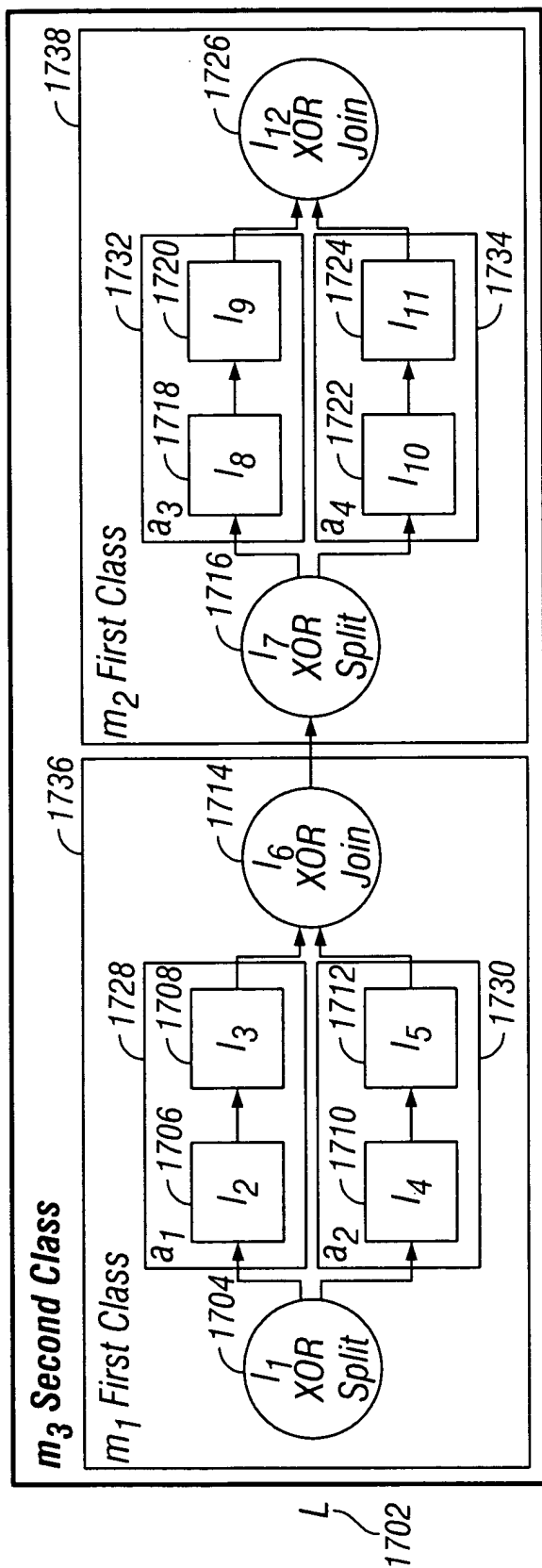


FIG. 17

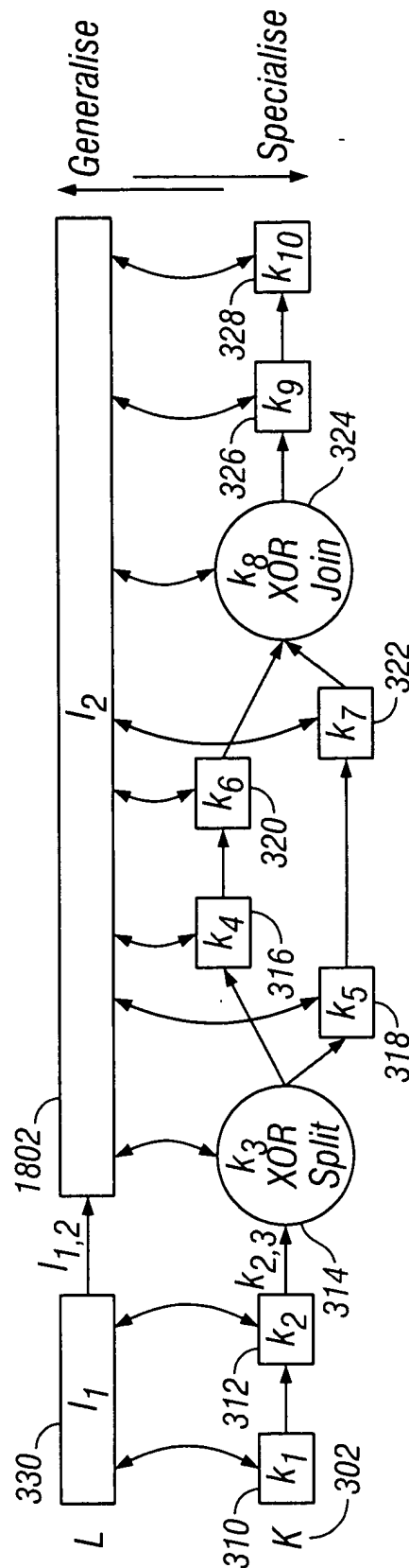


FIG. 18

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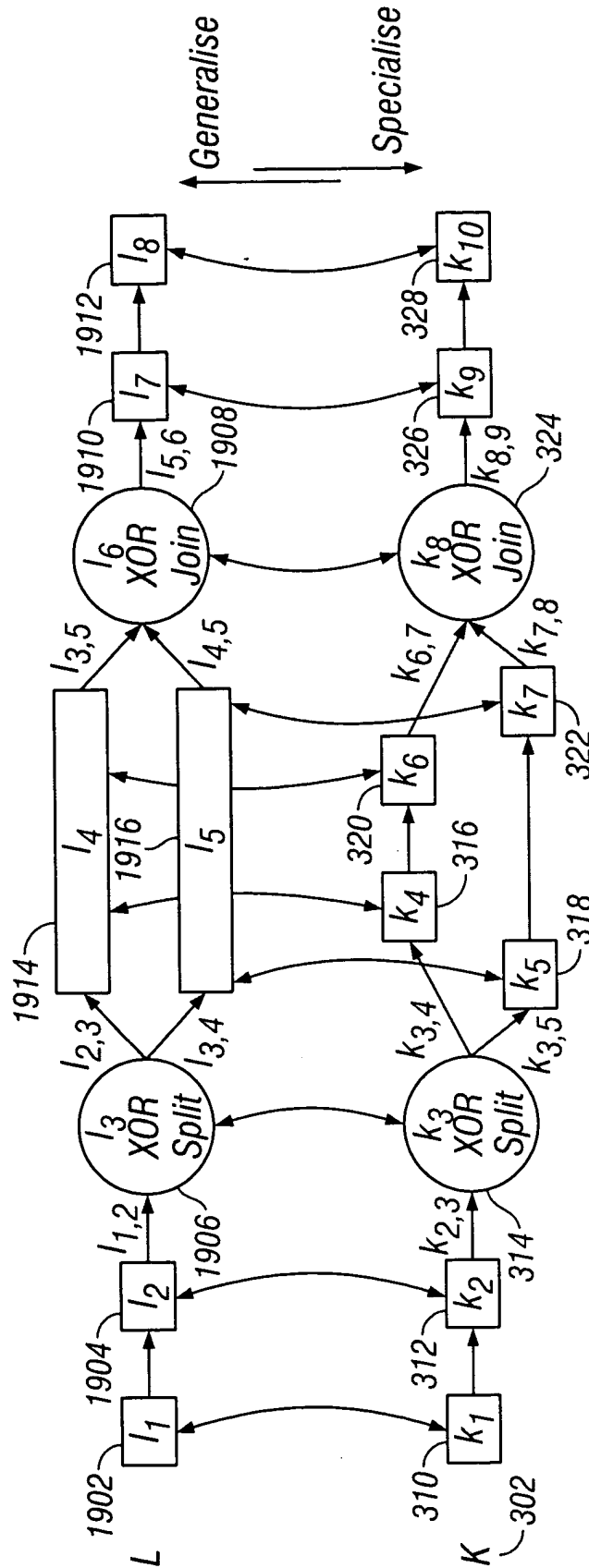


FIG. 19

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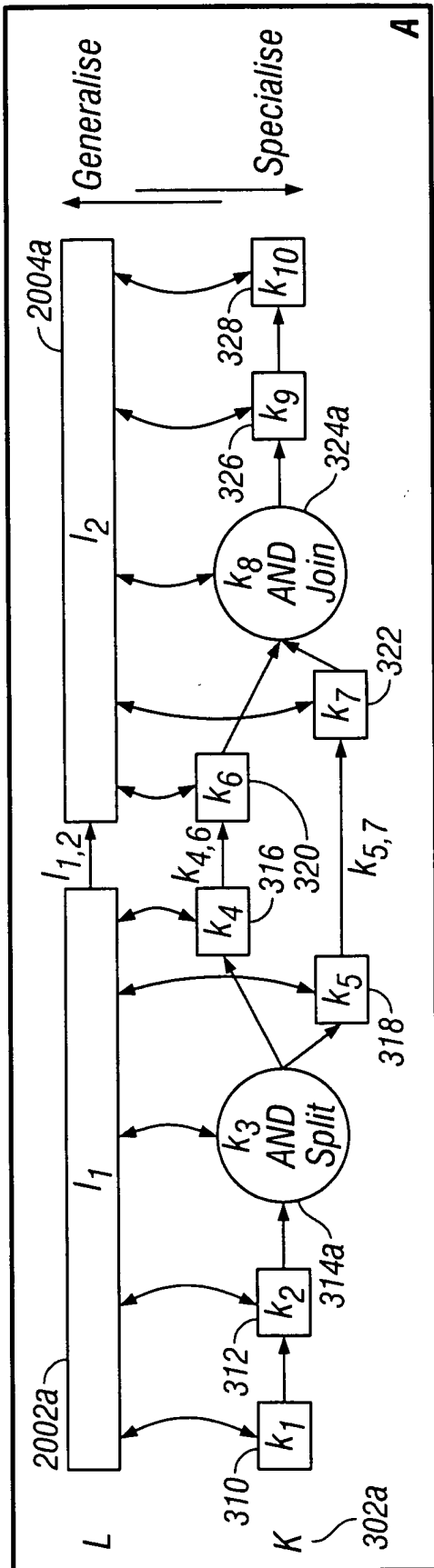


FIG. 20A

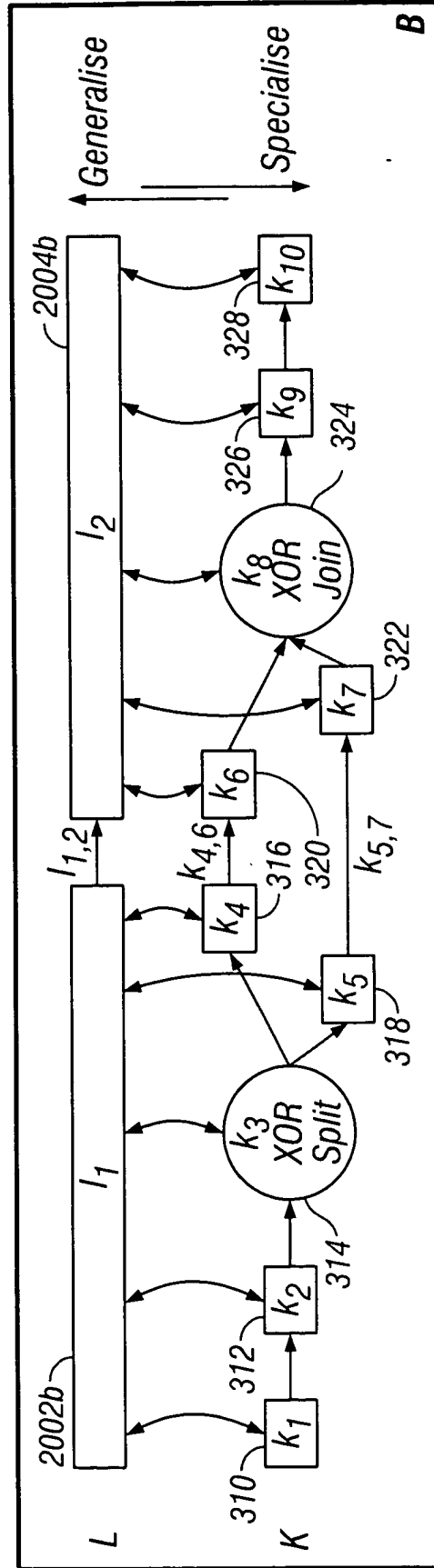
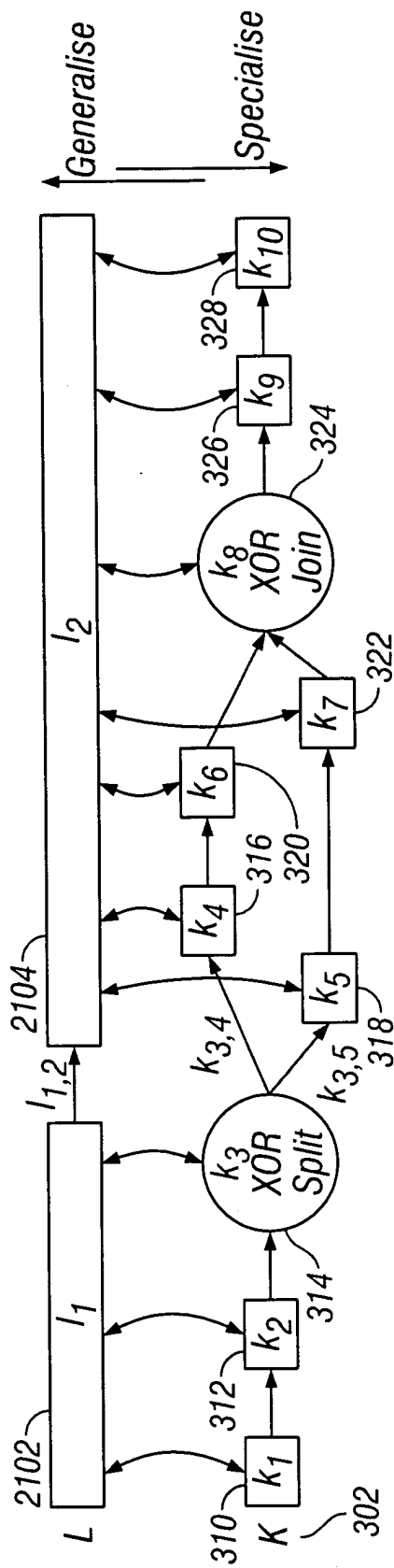


FIG. 20B



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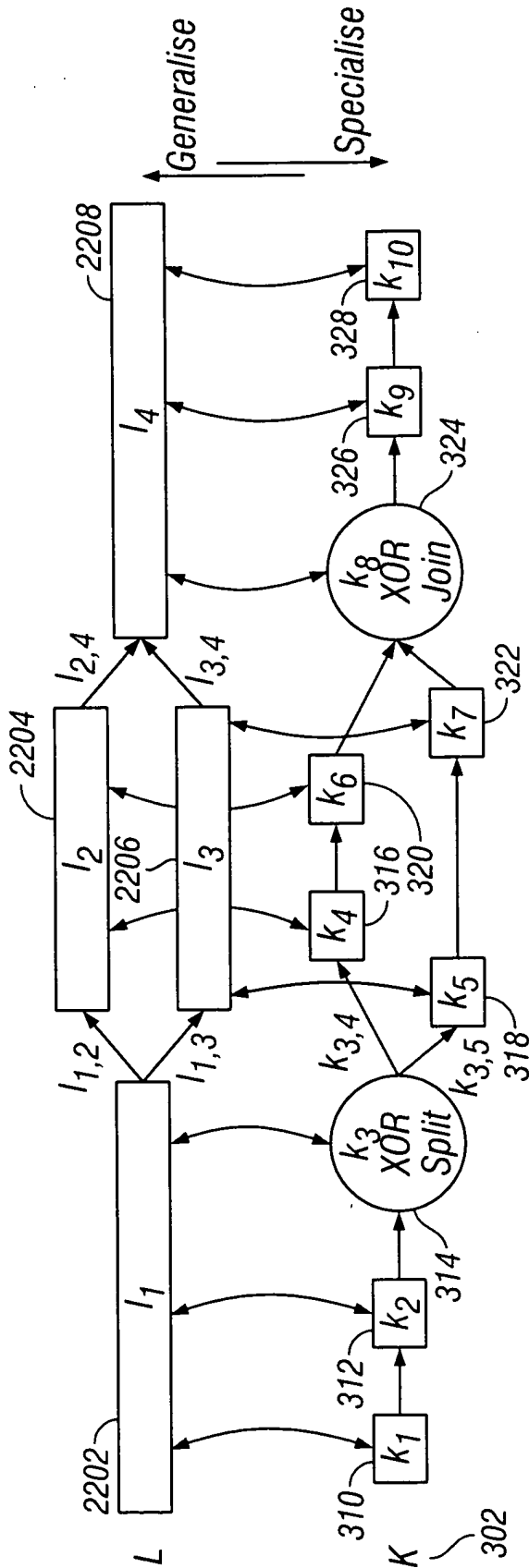


FIG. 22

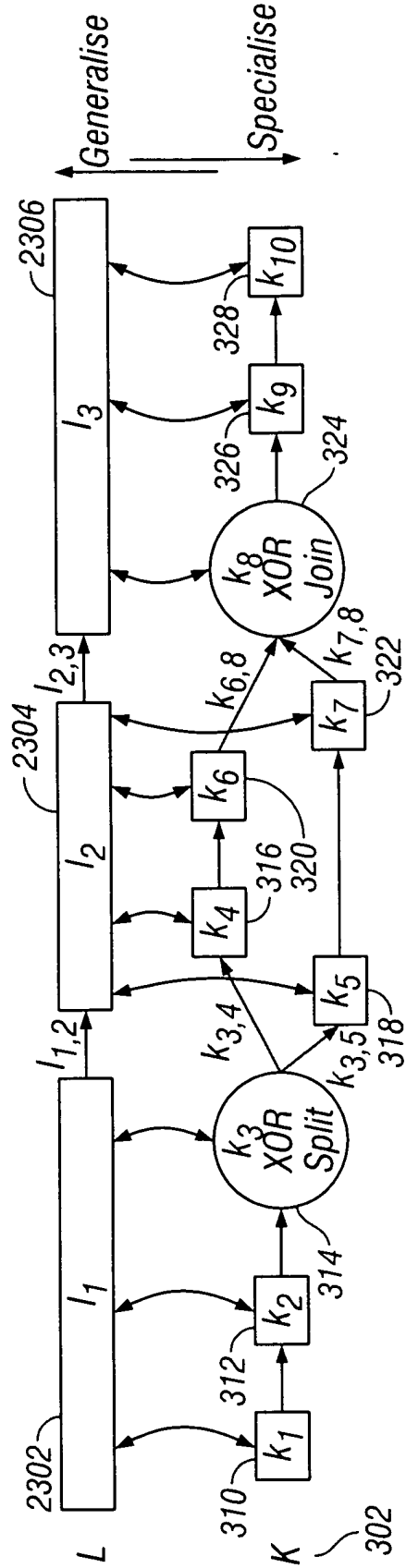


FIG. 23

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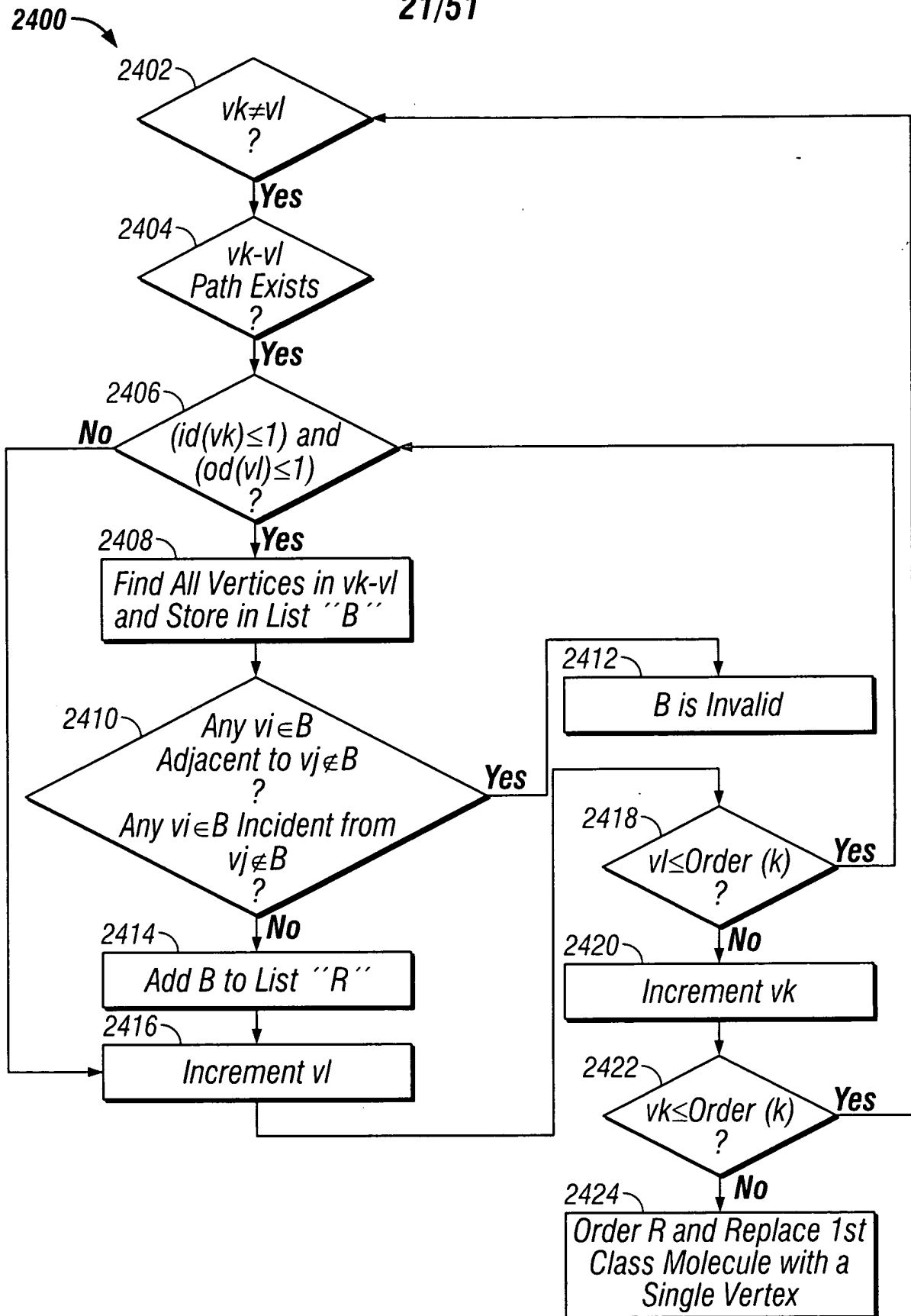


FIG. 24

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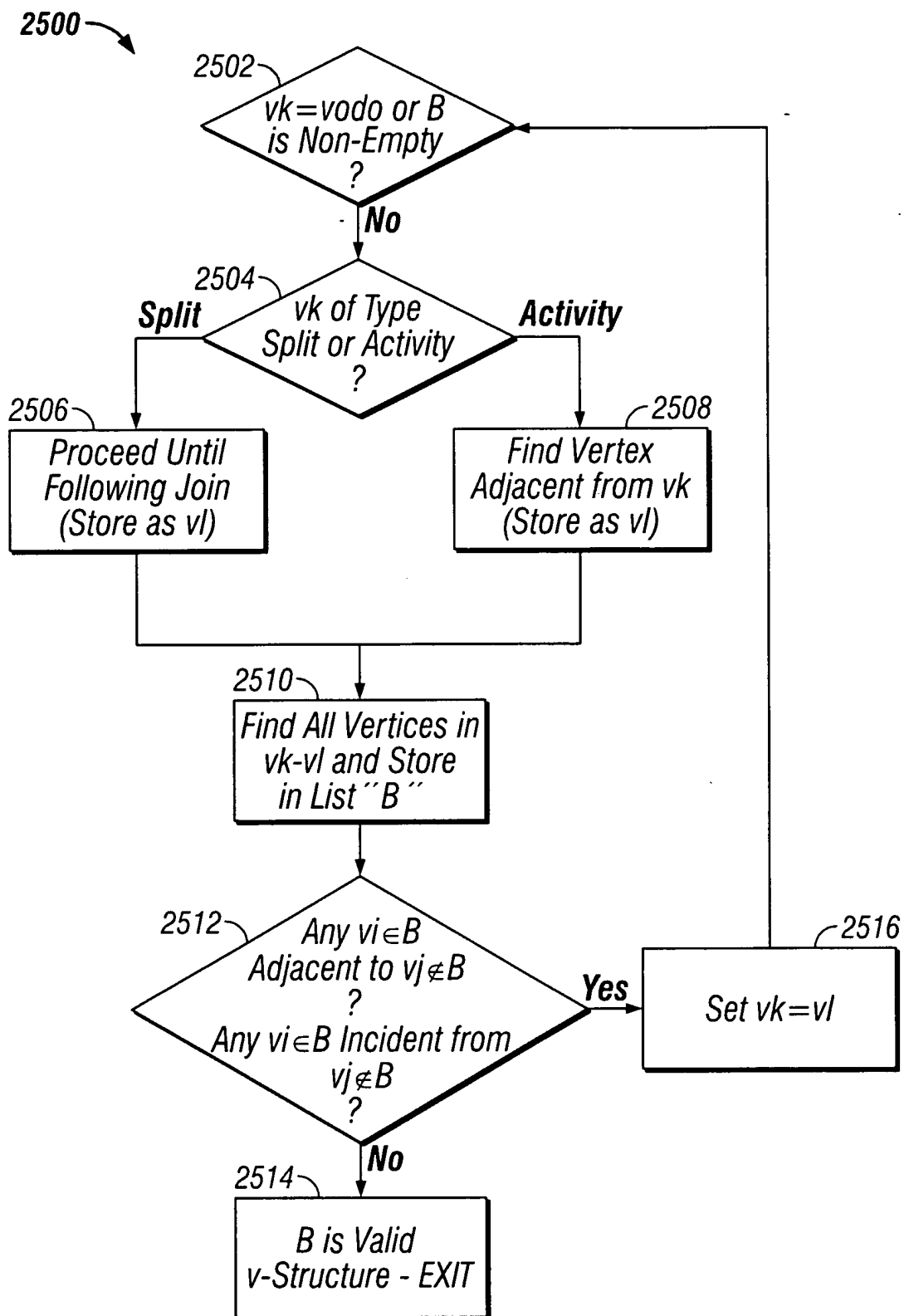


FIG. 25

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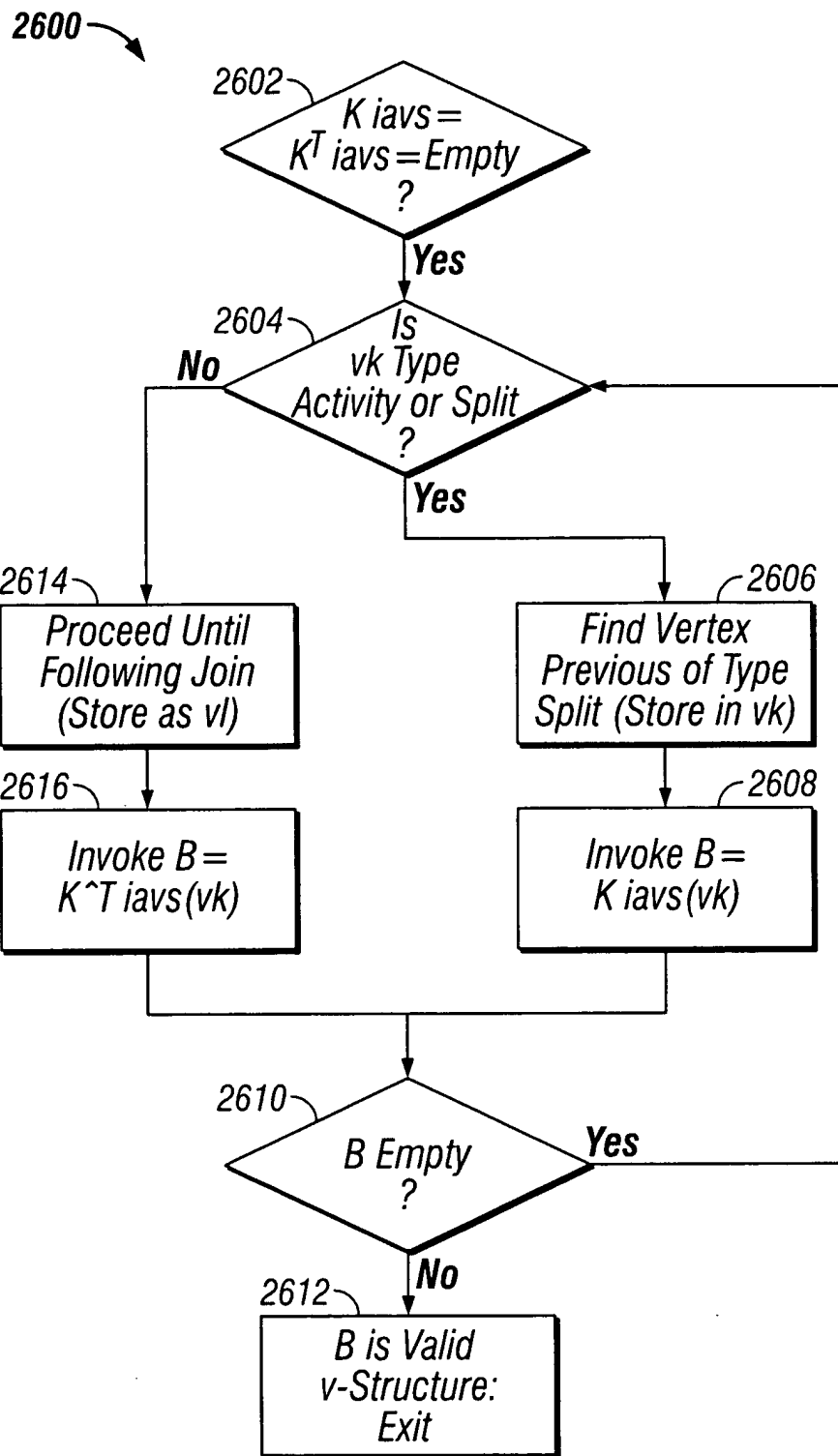


FIG. 26

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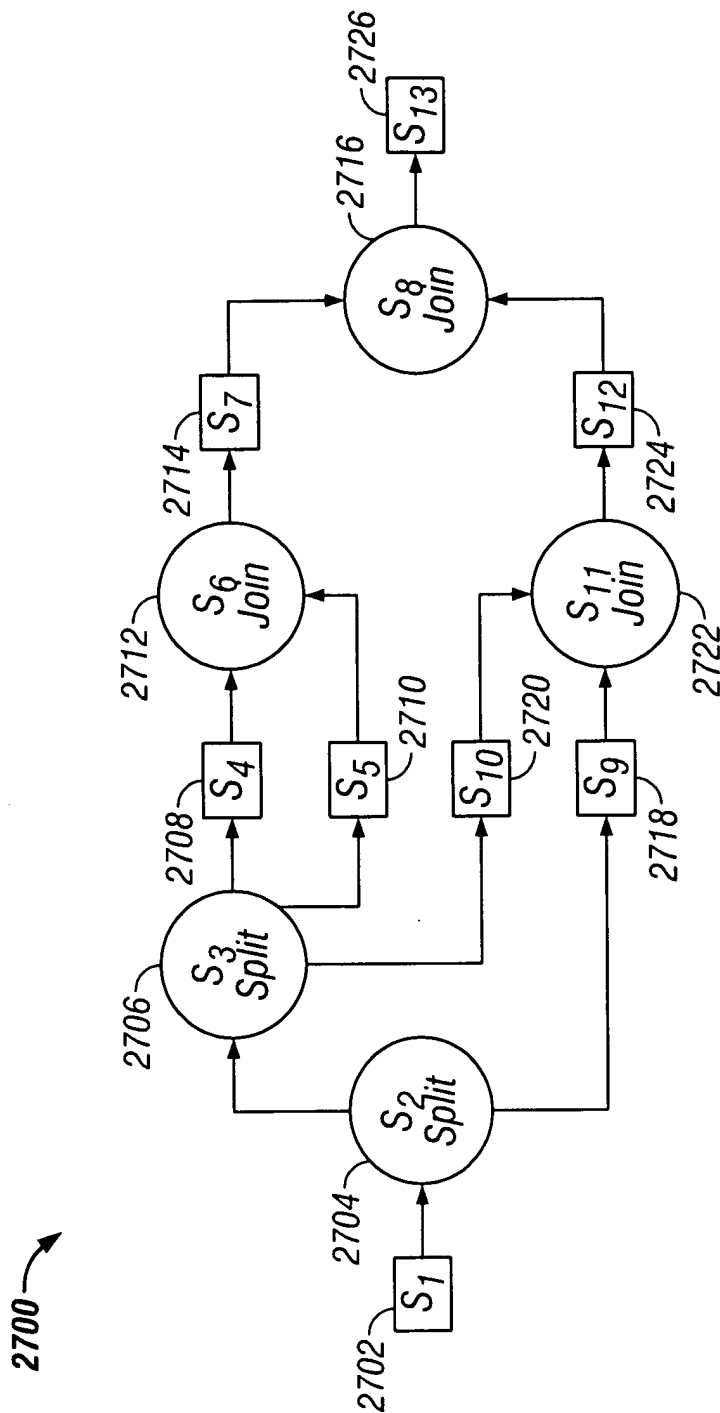


FIG. 27A

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V_k	$S_{iavs_e}(V_k)$
S_1	$\{S_1, S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_2	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_3	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_4	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_5	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_6	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_7	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_8	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_9	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_{10}	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_{11}	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_{12}	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_{13}	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}, S_{13}\}$

FIG. 27B

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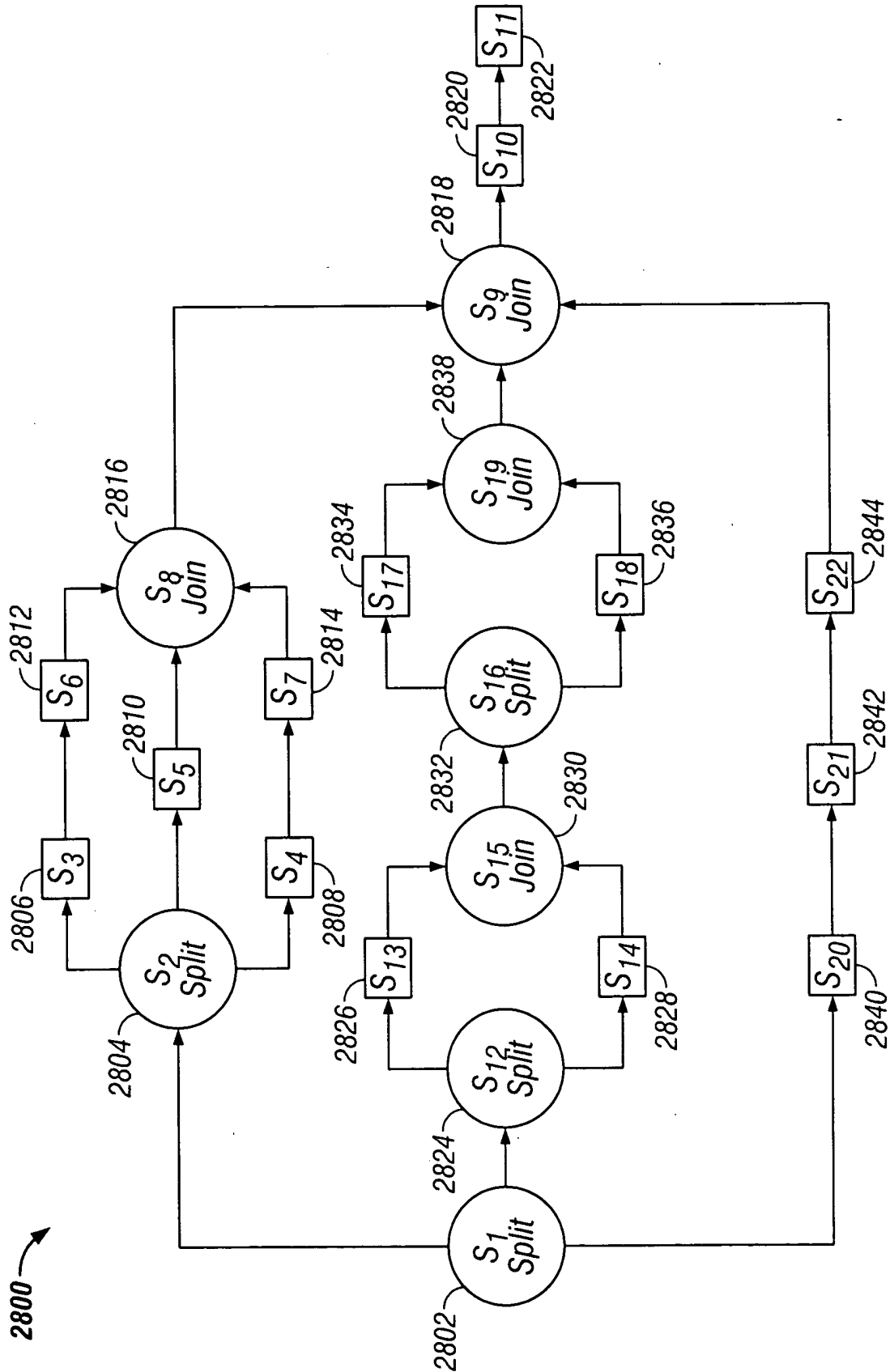


FIG. 28A

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V_k	$S_{iavse}(V_k)$
S_1	$\{S_1, S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{12}, S_{13}, S_{14}, S_{15}, S_{16}, S_{17}, S_{18}, S_{19}, S_{20}, S_{21}, S_{22}\}$
S_2	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8\}$
S_3	$\{S_3, S_6\}$
S_4	$\{S_4, S_7\}$
S_5	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8\}$
S_6	$\{S_3, S_6\}$
S_7	$\{S_4, S_7\}$
S_8	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8\}$
S_9	$\{S_1, S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{12}, S_{13}, S_{14}, S_{15}, S_{16}, S_{17}, S_{18}, S_{19}, S_{20}, S_{21}, S_{22}\}$
S_{10}	$\{S_1, S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{12}, S_{13}, S_{14}, S_{15}, S_{16}, S_{17}, S_{18}, S_{19}, S_{20}, S_{21}, S_{22}\}$ $\{S_{10}, S_{11}\}$
S_{11}	$\{S_{10}, S_{11}\}$
S_{12}	$\{S_{12}, S_{13}, S_{14}, S_{15}\}$
S_{13}	$\{S_{12}, S_{13}, S_{14}, S_{15}\}$
S_{14}	$\{S_{12}, S_{13}, S_{14}, S_{15}\}$
S_{15}	$\{S_{12}, S_{13}, S_{14}, S_{15}\}$
S_{16}	$\{S_{16}, S_{17}, S_{18}, S_{19}\}$
S_{17}	$\{S_{16}, S_{17}, S_{18}, S_{19}\}$
S_{18}	$\{S_{16}, S_{17}, S_{18}, S_{19}\}$
S_{19}	$\{S_{16}, S_{17}, S_{18}, S_{19}\}$
S_{20}	$\{S_{20}, S_{21}\}$
S_{21}	$\{S_{20}, S_{21}\}, \{S_{21}, S_{22}\}$
S_{22}	$\{S_{21}, S_{22}\}$

FIG. 28B

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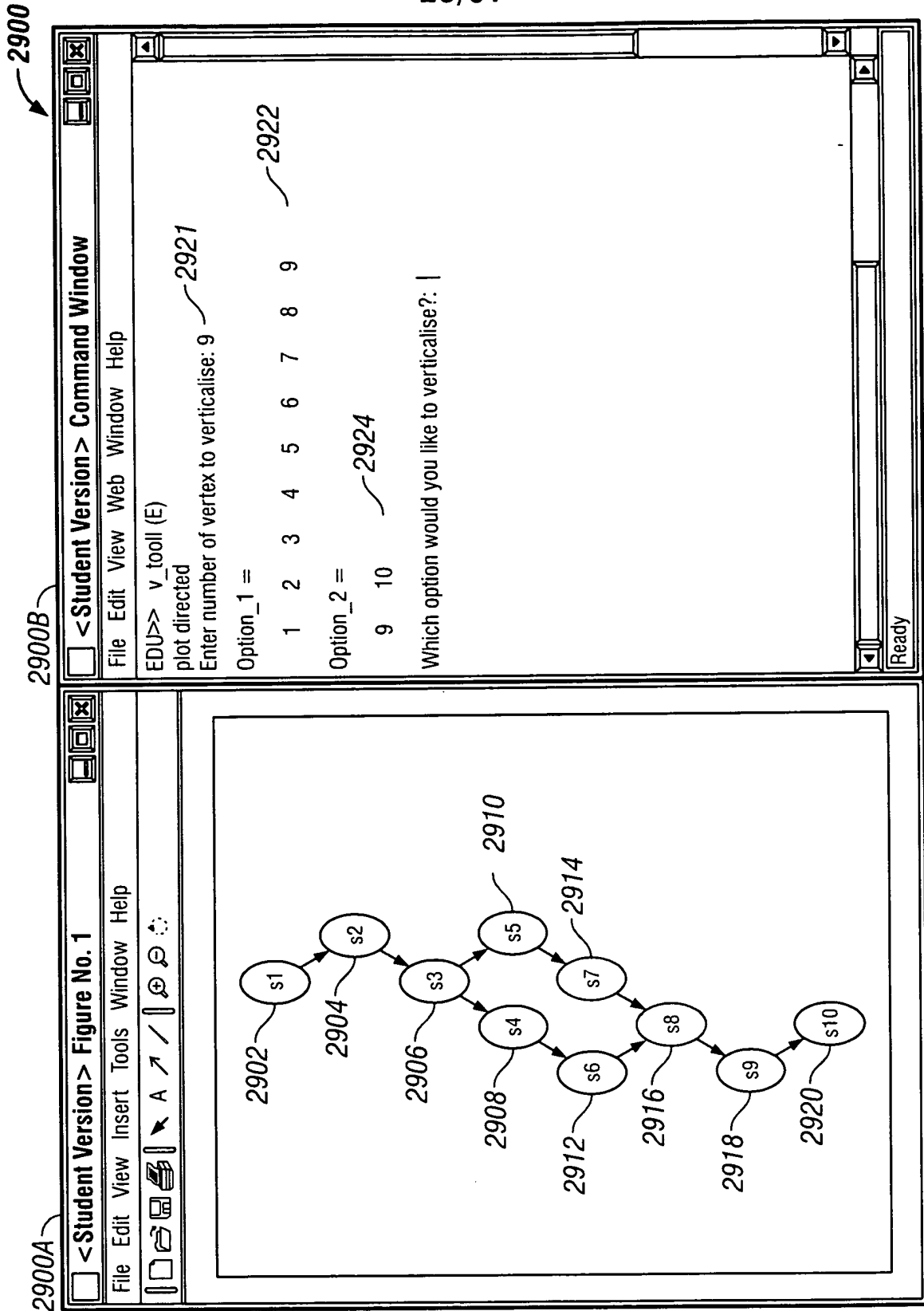


FIG. 29

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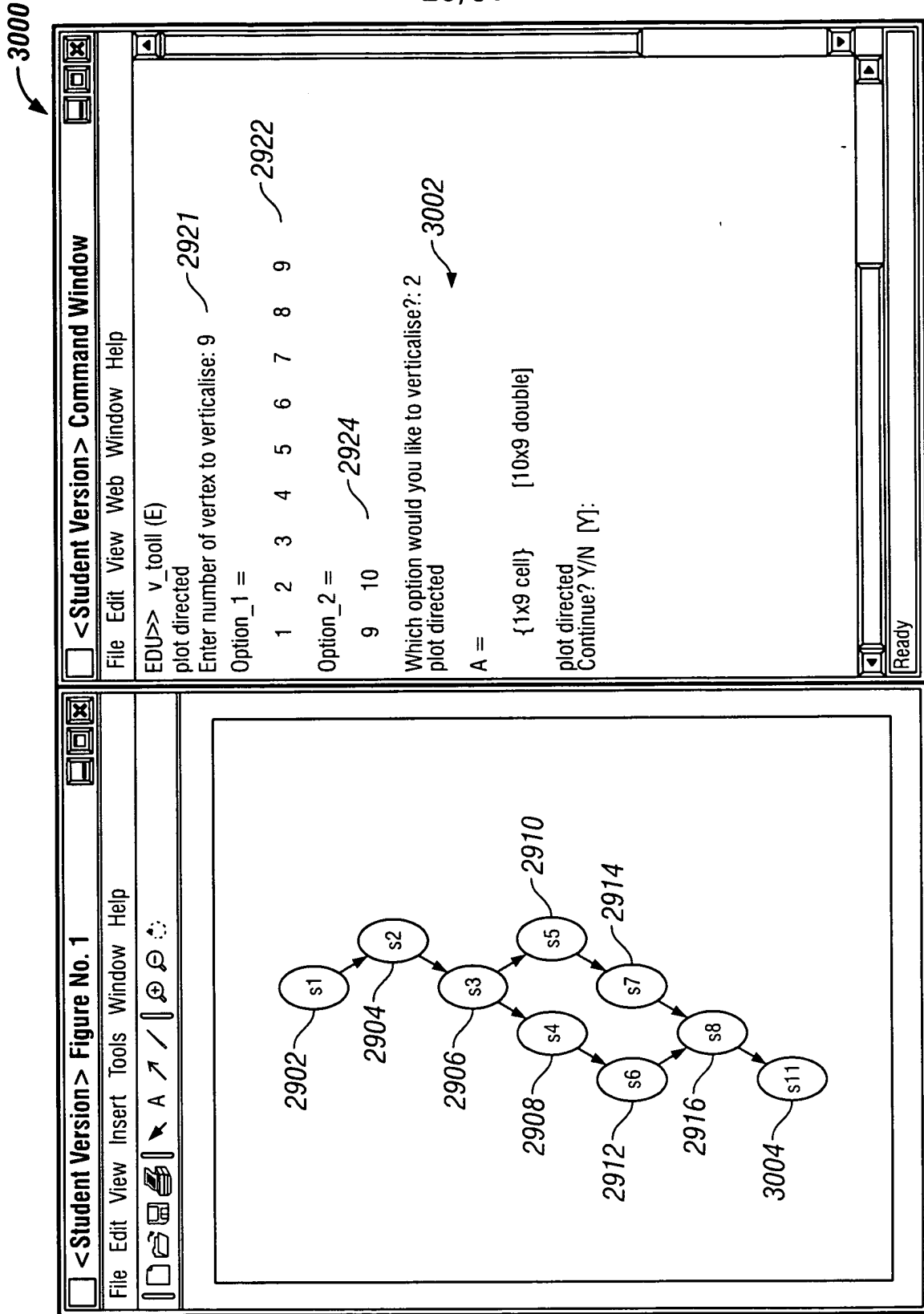


FIG. 30

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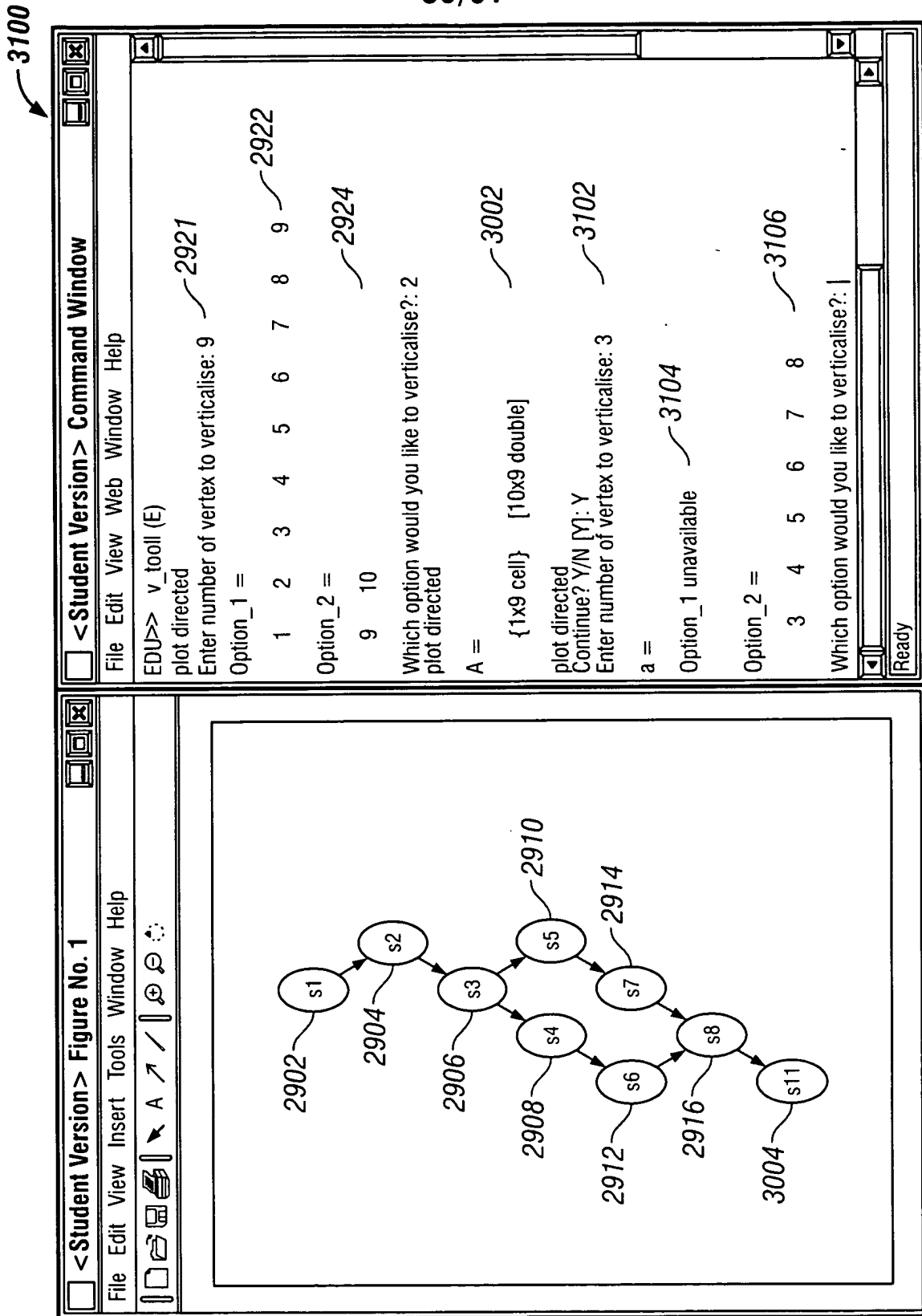


FIG. 31

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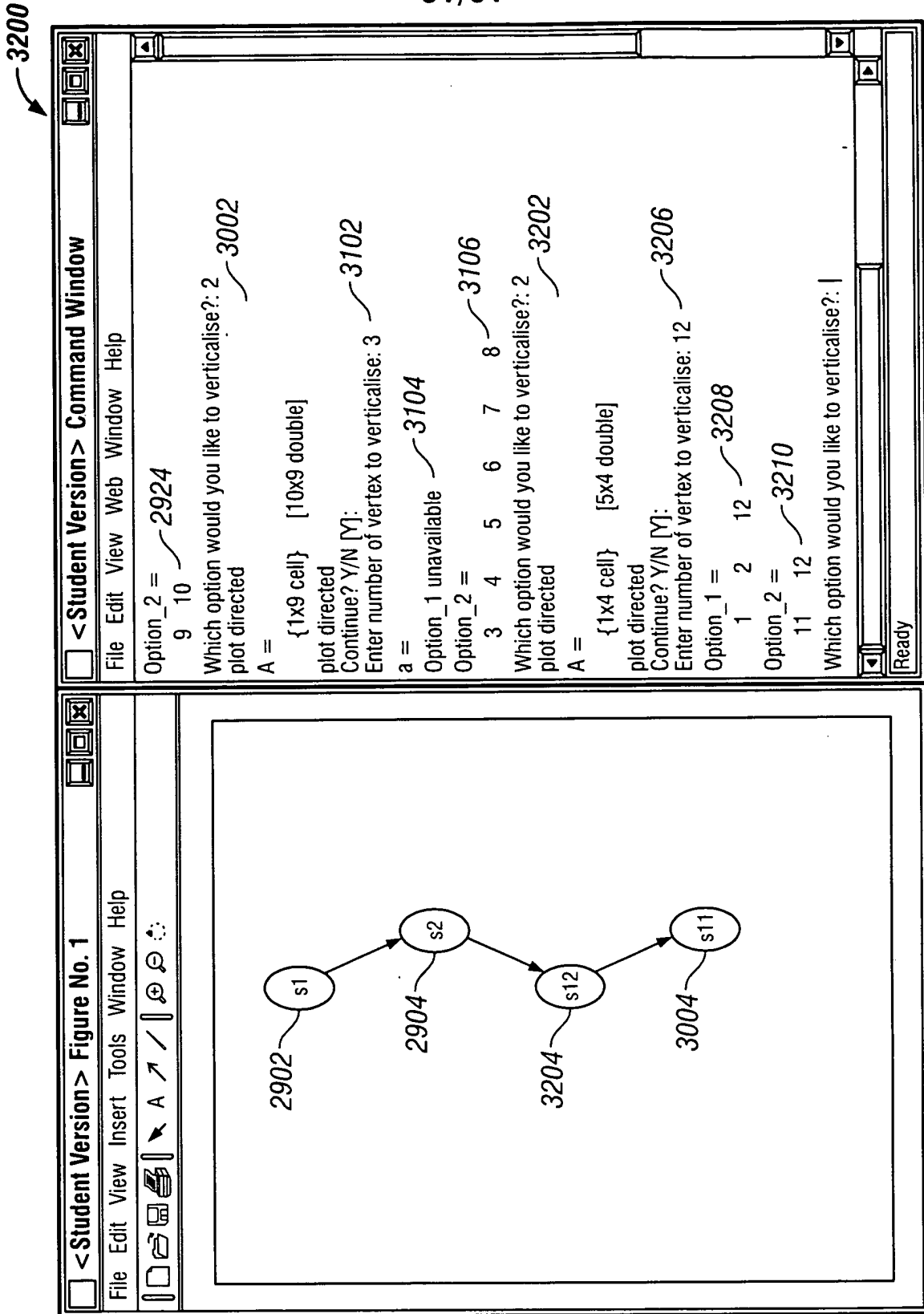
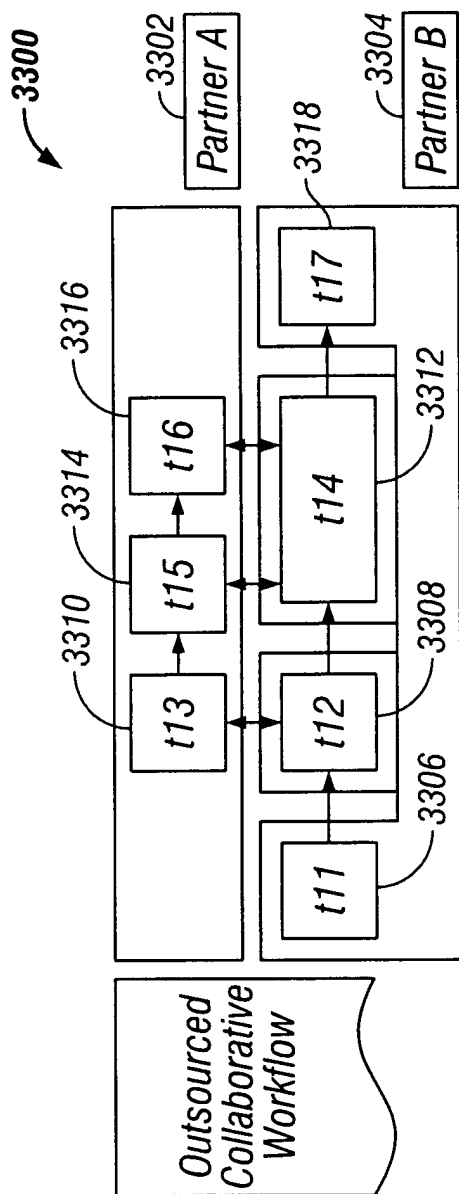


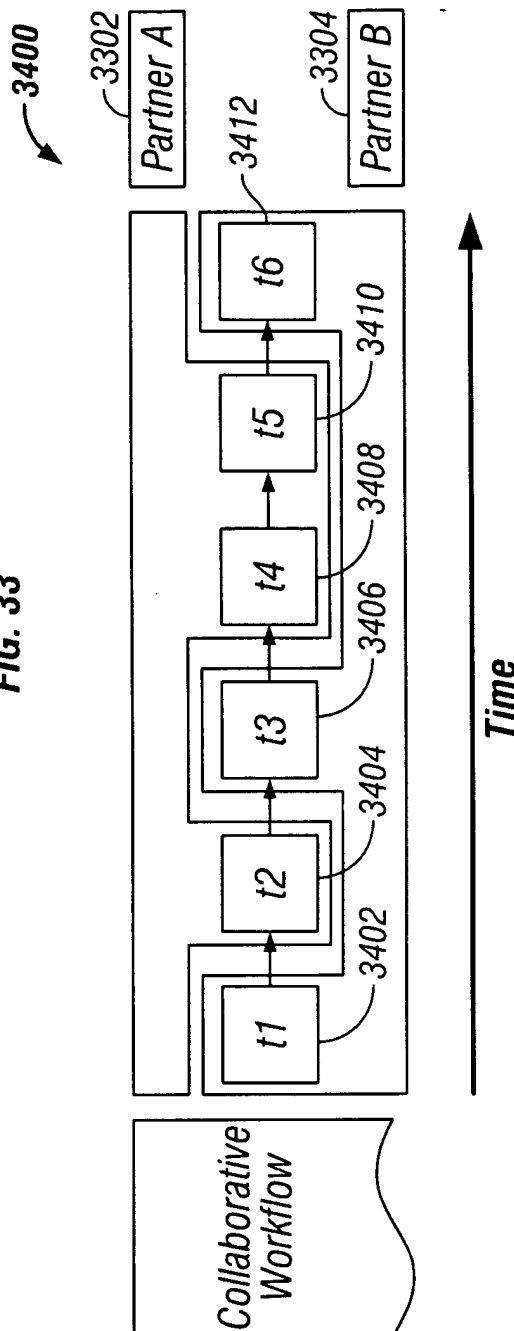
FIG. 32

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Time

FIG. 33



Time

FIG. 34

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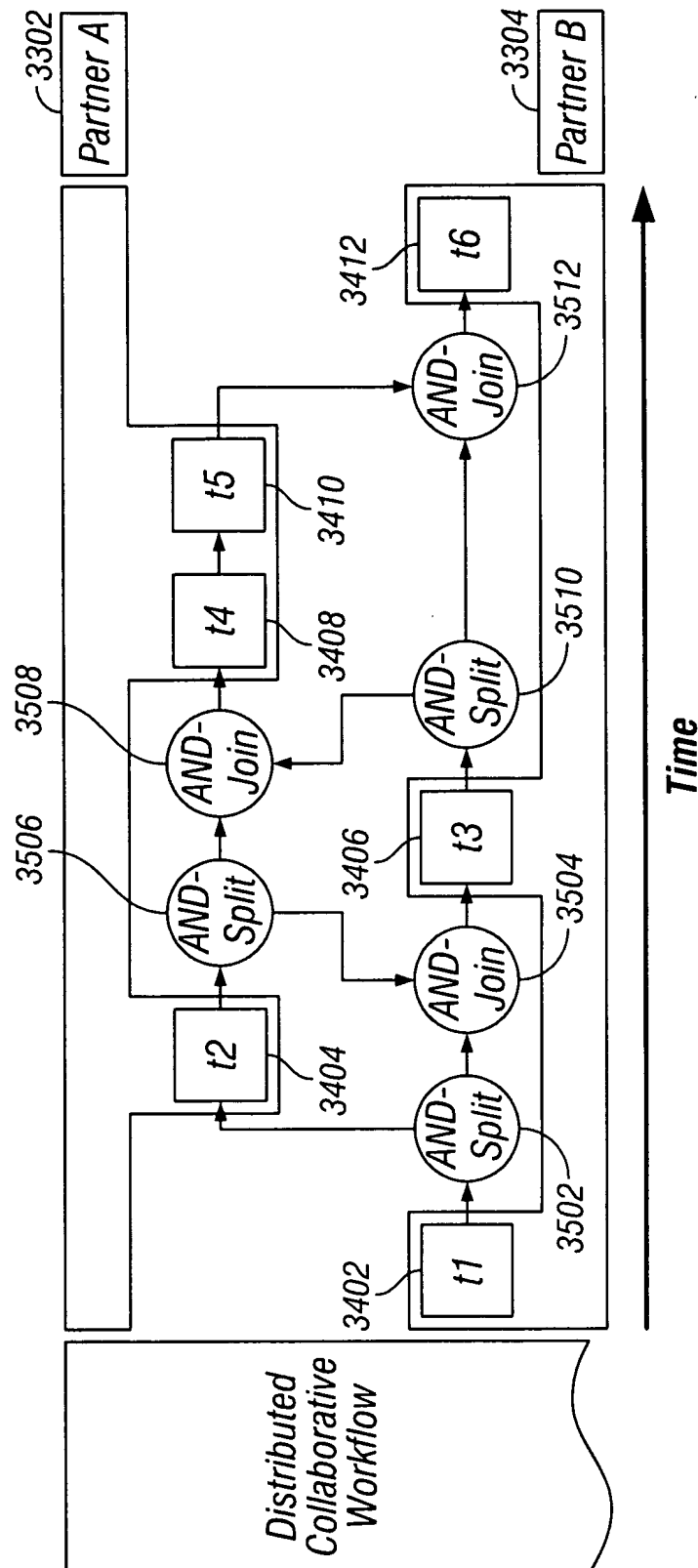


FIG. 35

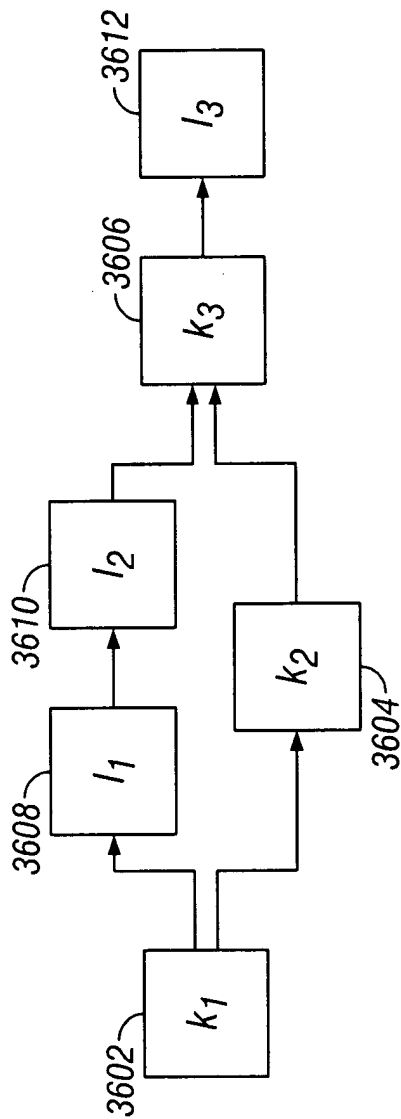


FIG. 36

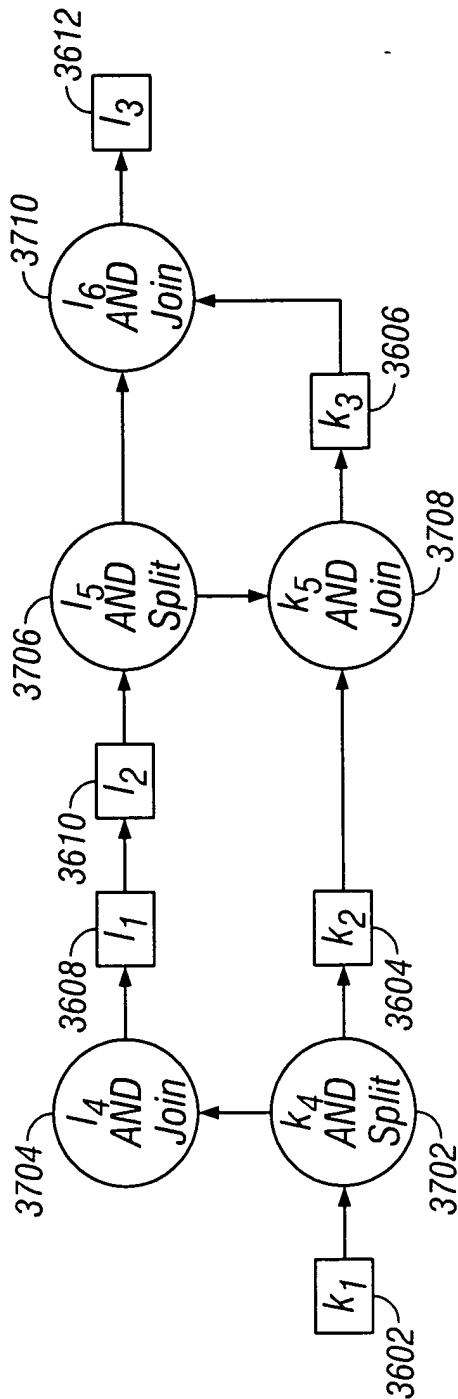


FIG. 37

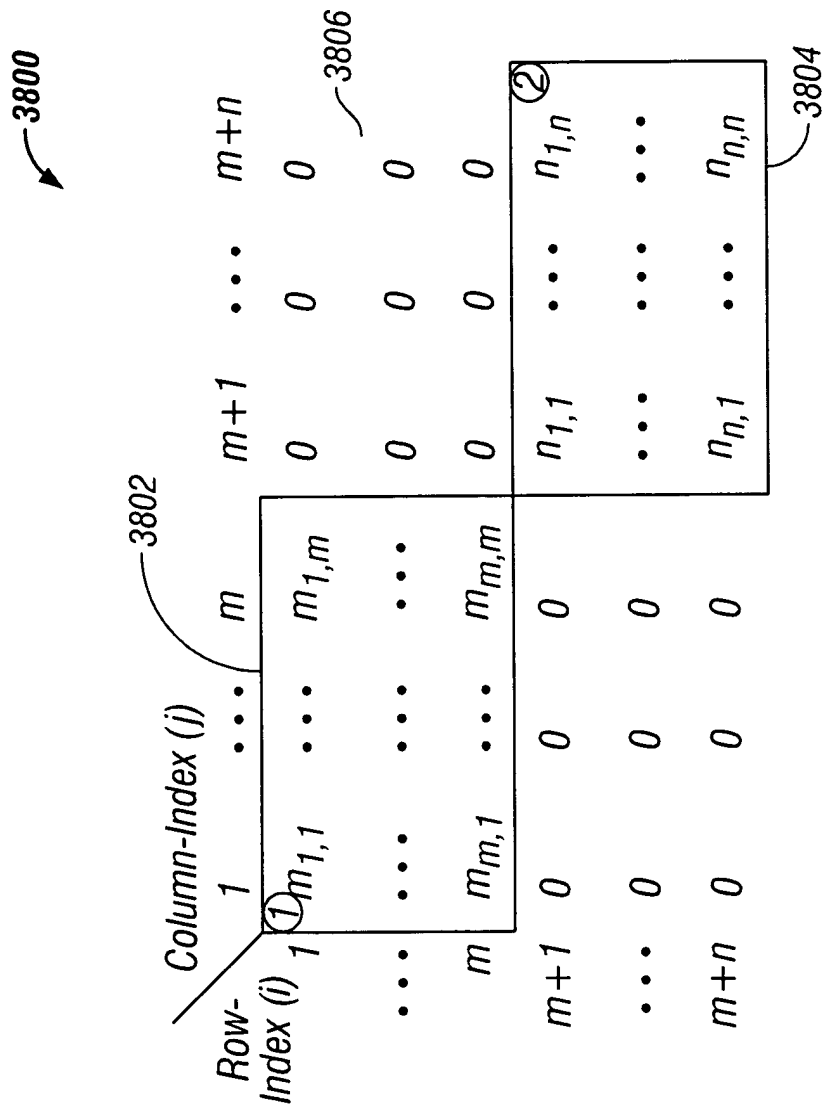


FIG. 38

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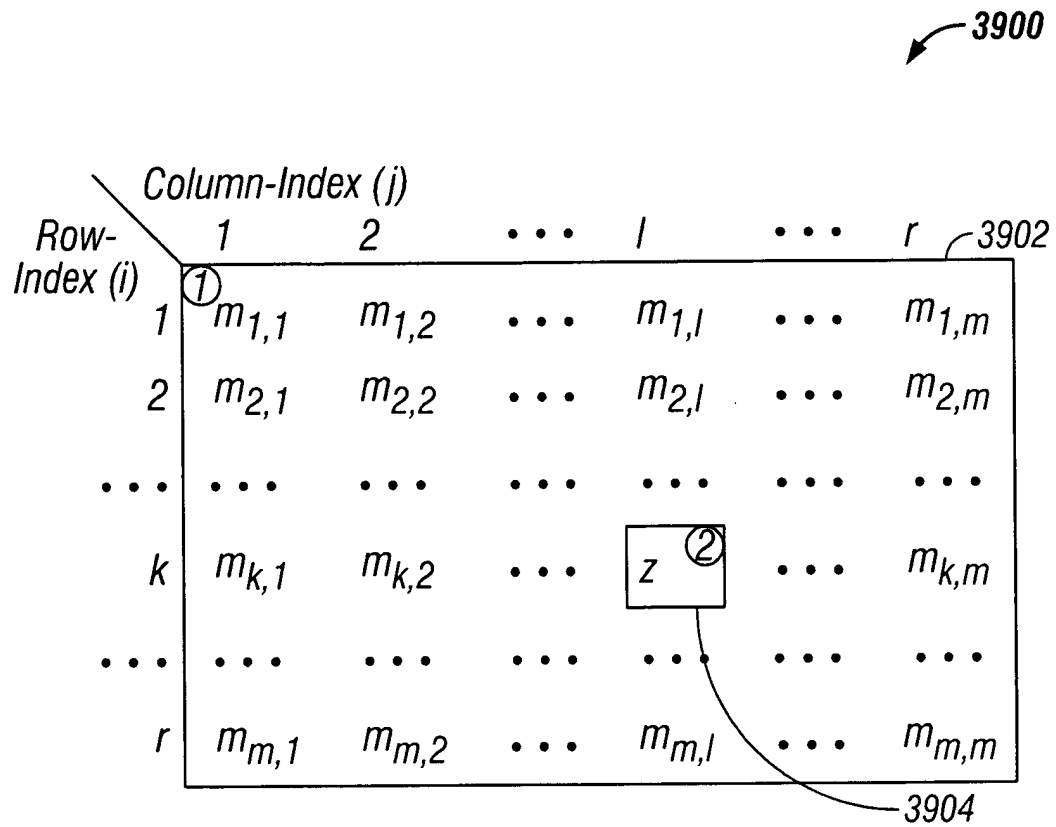


FIG. 39

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4000

Row-Index (i)	Column-Index (j)			k	m			r
	1	2	m	r	
1	^① $m_{1,1}$	$m_{1,2}$...	0	...	$m_{1,m}$	$m_{1,k}$	^②
2	$m_{2,1}$	$m_{2,2}$...	0	...	$m_{2,m}$	$m_{2,k}$	
...	...	...	...	0	...	...	...
k	$m_{k,1}$	$m_{k,2}$	...	0	...	$m_{k,m}$	$m_{k,k}$	
...	...	...	...	0	...	...	...
m	$m_{m,1}$	$m_{m,2}$	...	0	...	$m_{m,m}$	$m_{m,k}$	
r	0	0	0	^③ 1	0	0	0	

4006

FIG. 40

4100

Row- Index (i)	Column-Index (j)					r
	1	2	...	k	m	
1	m _{1,1}	m _{1,2}	...	m _{1,k}	m _{1,m}	0
2	m _{2,1}	m _{2,2}	...	m _{2,k}	m _{2,m}	0
...	0
k	0	0	0	0	0	1
...	0
m	m _{m,1}	m _{m,2}	...	m _{m,k}	m _{m,m}	0
r	m _{k,1}	m _{k,2}	...	m _{k,k}	m _{k,m}	0

4106

4104

FIG. 41

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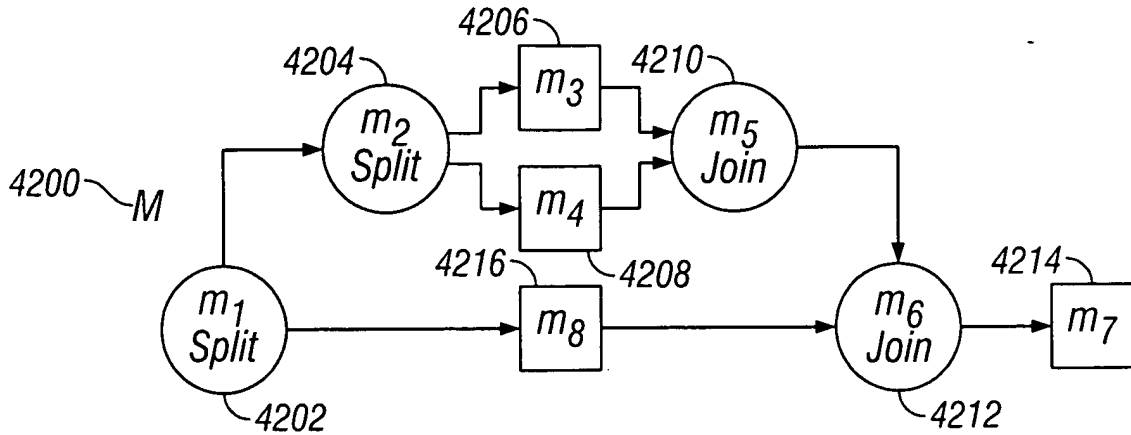


FIG. 42

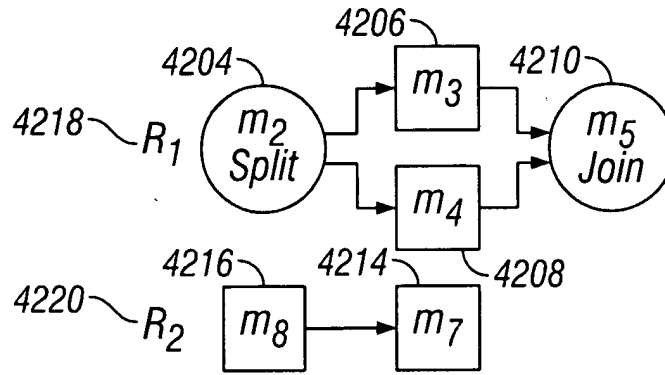


FIG. 42A

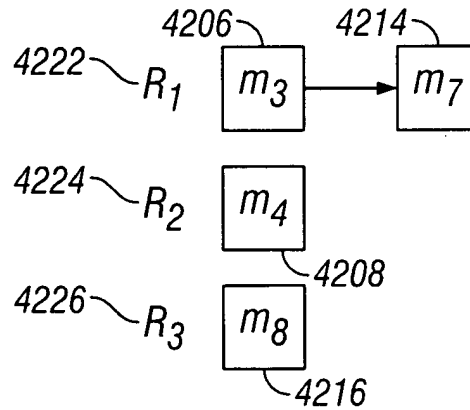


FIG. 42B

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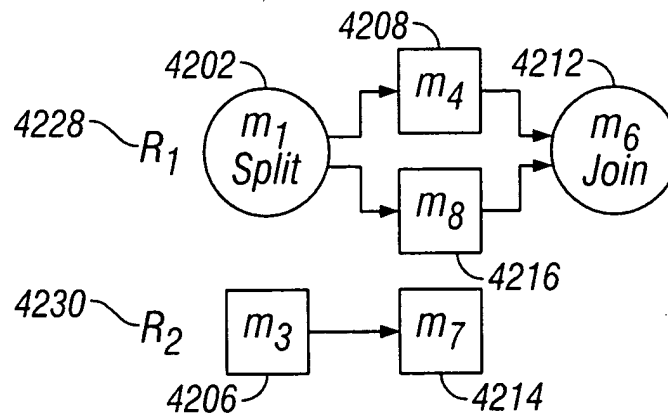


FIG. 42C

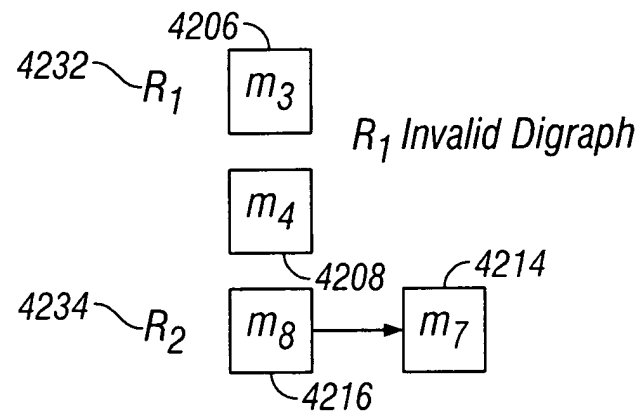


FIG. 42D

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4300

Row-Index (i)	Column-Index (j)					
	1	2	...	k-1	k	k+1
1	$m_{1,1}$	$m_{1,2}$...	$m_{1,k-1}$	$m_{1,k+1}$	$m_{1,m}$
2	$m_{2,1}$	$m_{2,2}$...	$m_{2,k-1}$	$m_{2,k+1}$	$m_{2,m}$
...
k-1	$m_{k-1,1}$	$m_{k-1,2}$	...	$m_{k-1,k-1}$	$m_{k-1,k+1}$	$m_{k-1,m}$
k	$m_{k+1,1}$	$m_{k+1,2}$...	$m_{k+1,k-1}$	$m_{k+1,k+1}$	$m_{k+1,m}$
k+1	$m_{k+2,1}$	$m_{k+2,2}$...	$m_{k+2,k-1}$	$m_{k+2,k+1}$	$m_{k+2,m}$
...
r	$m_{m,1}$	$m_{m,2}$...	$m_{m,k-1}$	$m_{m,k+1}$	$m_{m,m}$

4304

4306

4308

FIG. 43

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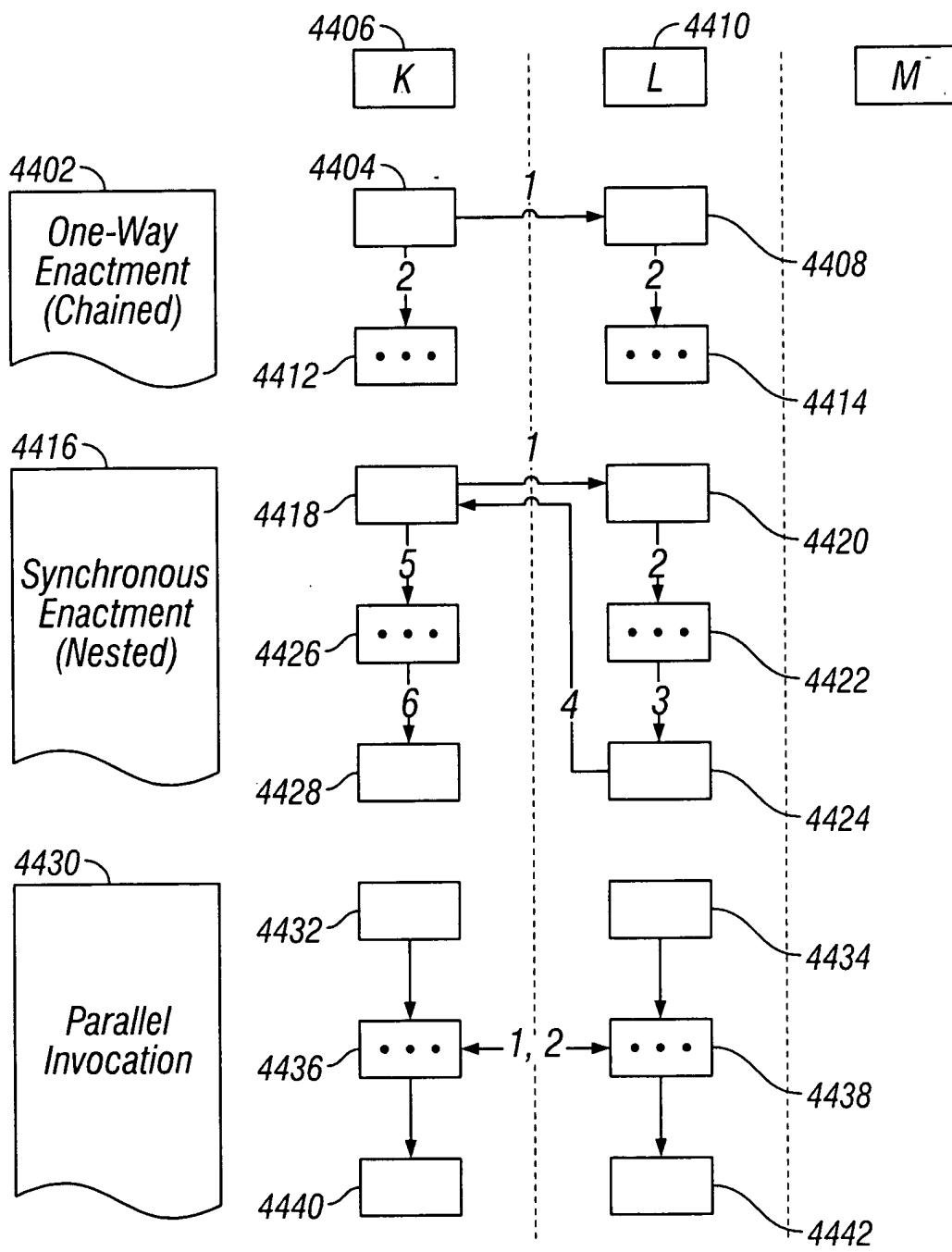


FIG. 44

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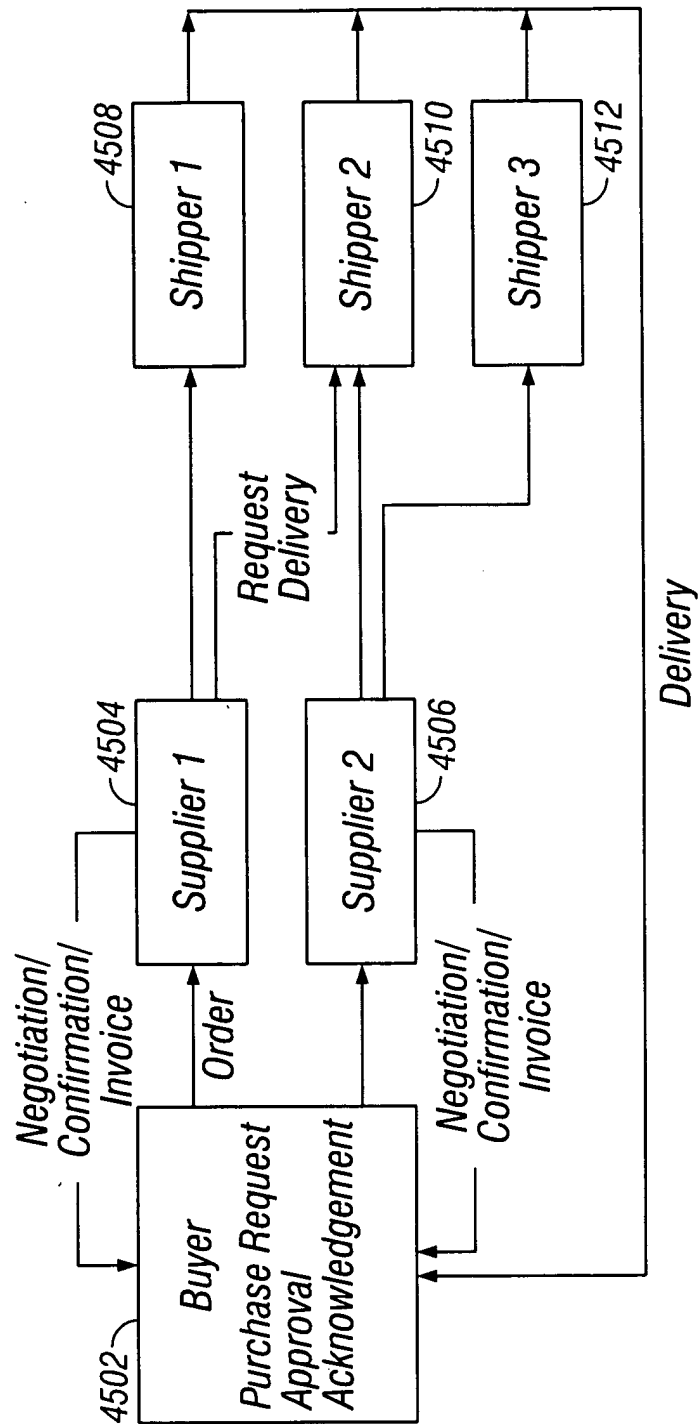


FIG. 45

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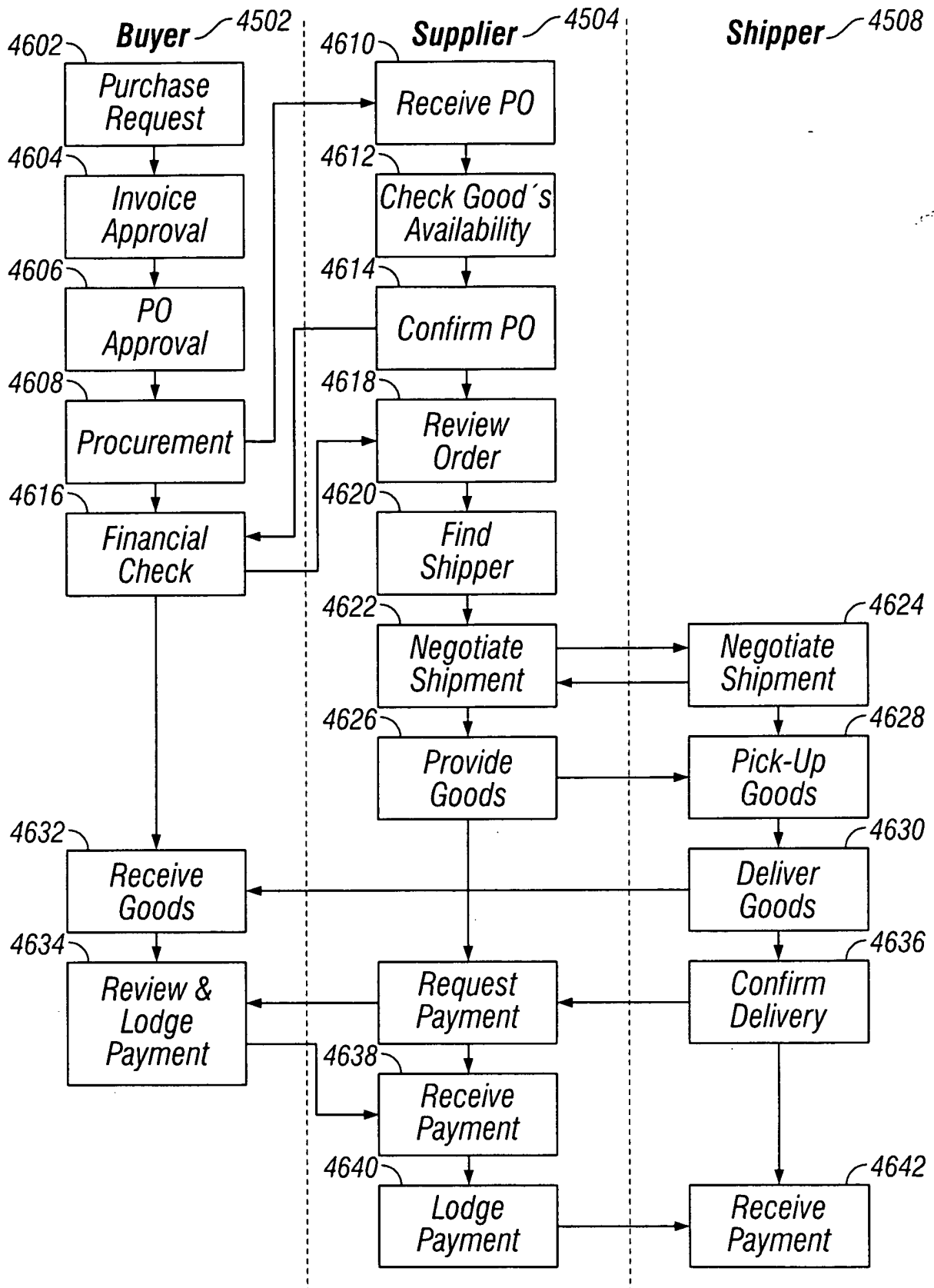


FIG. 46

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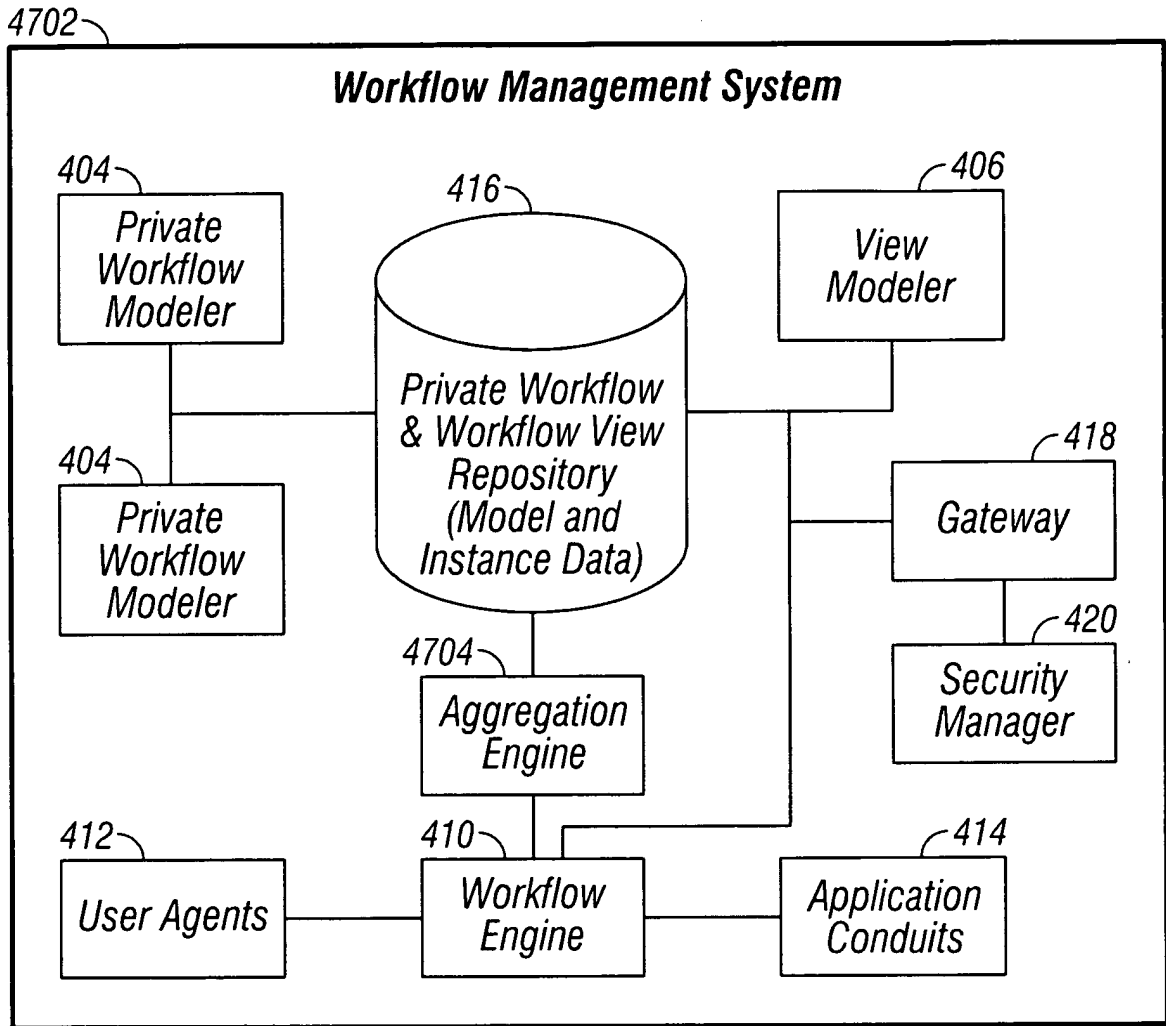


FIG. 47

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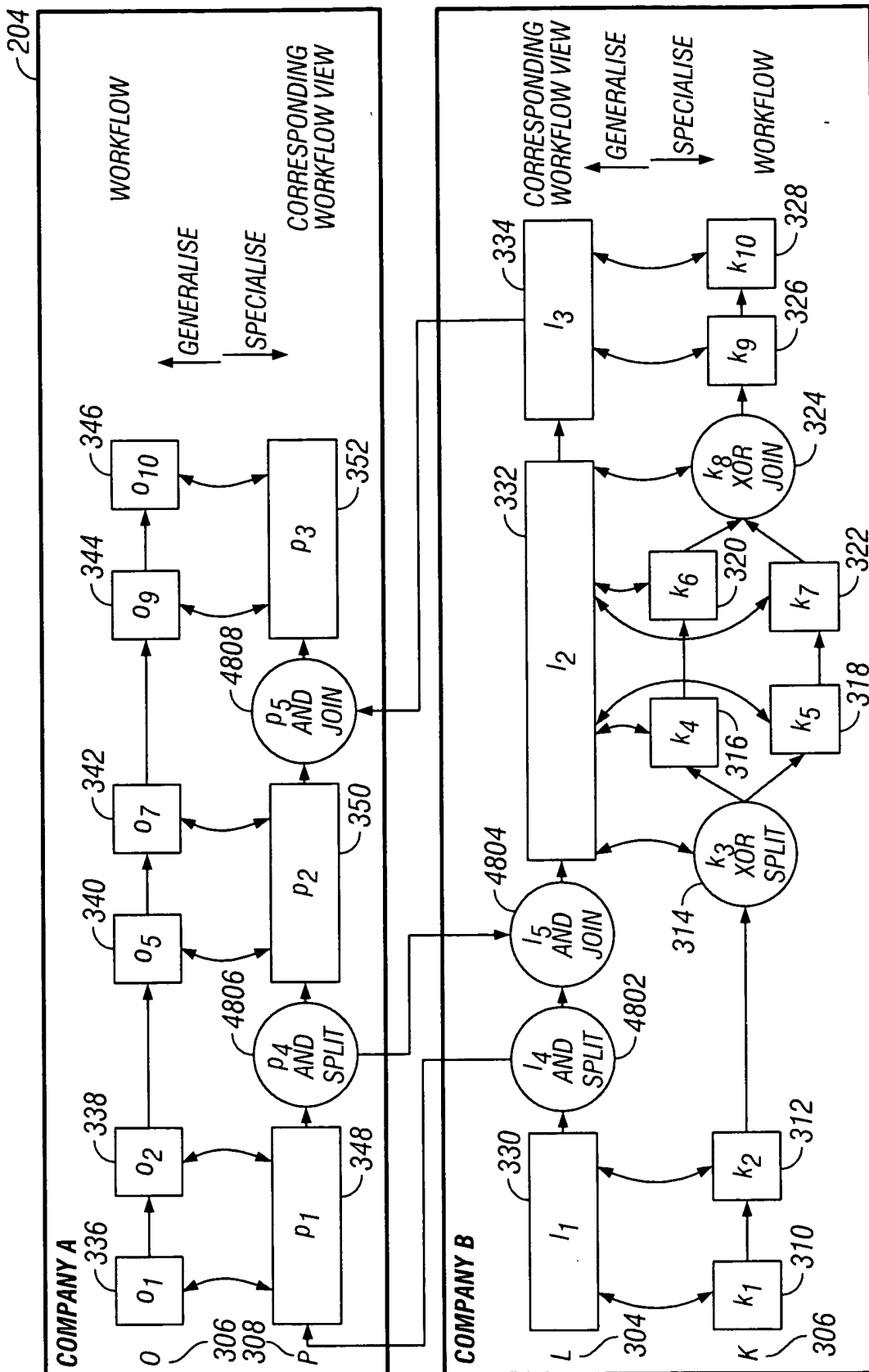


FIG. 48



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5000

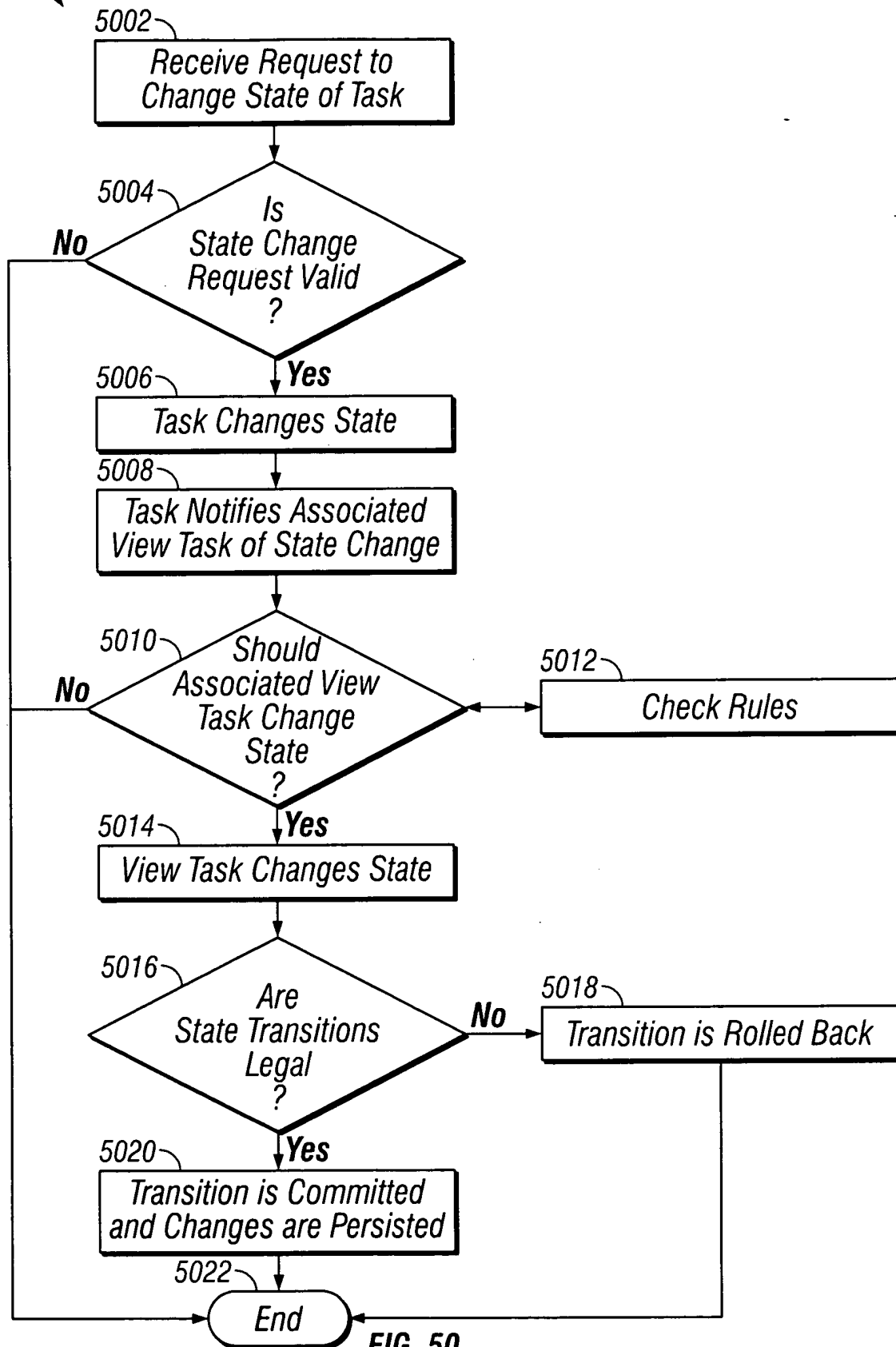


FIG. 50

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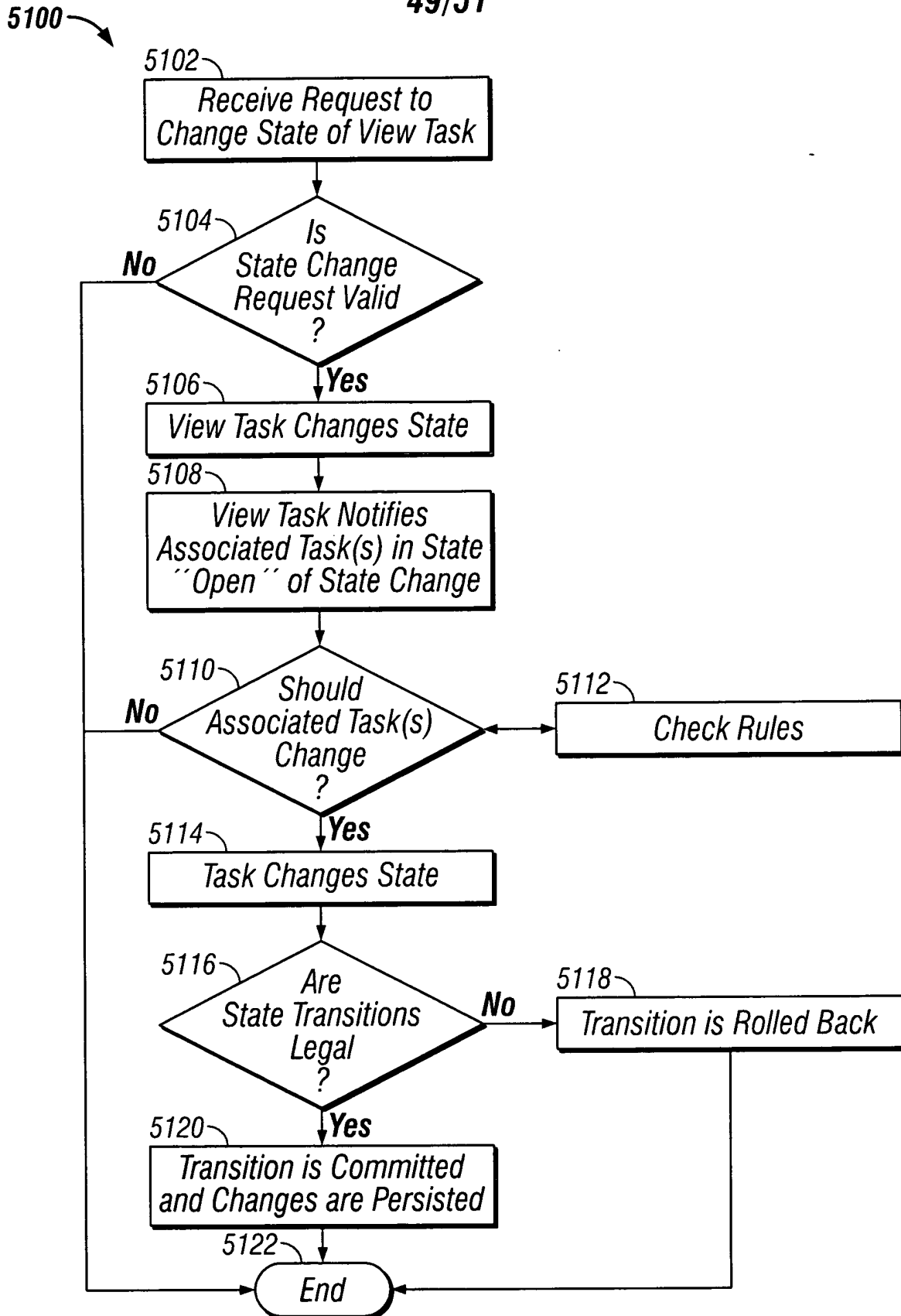
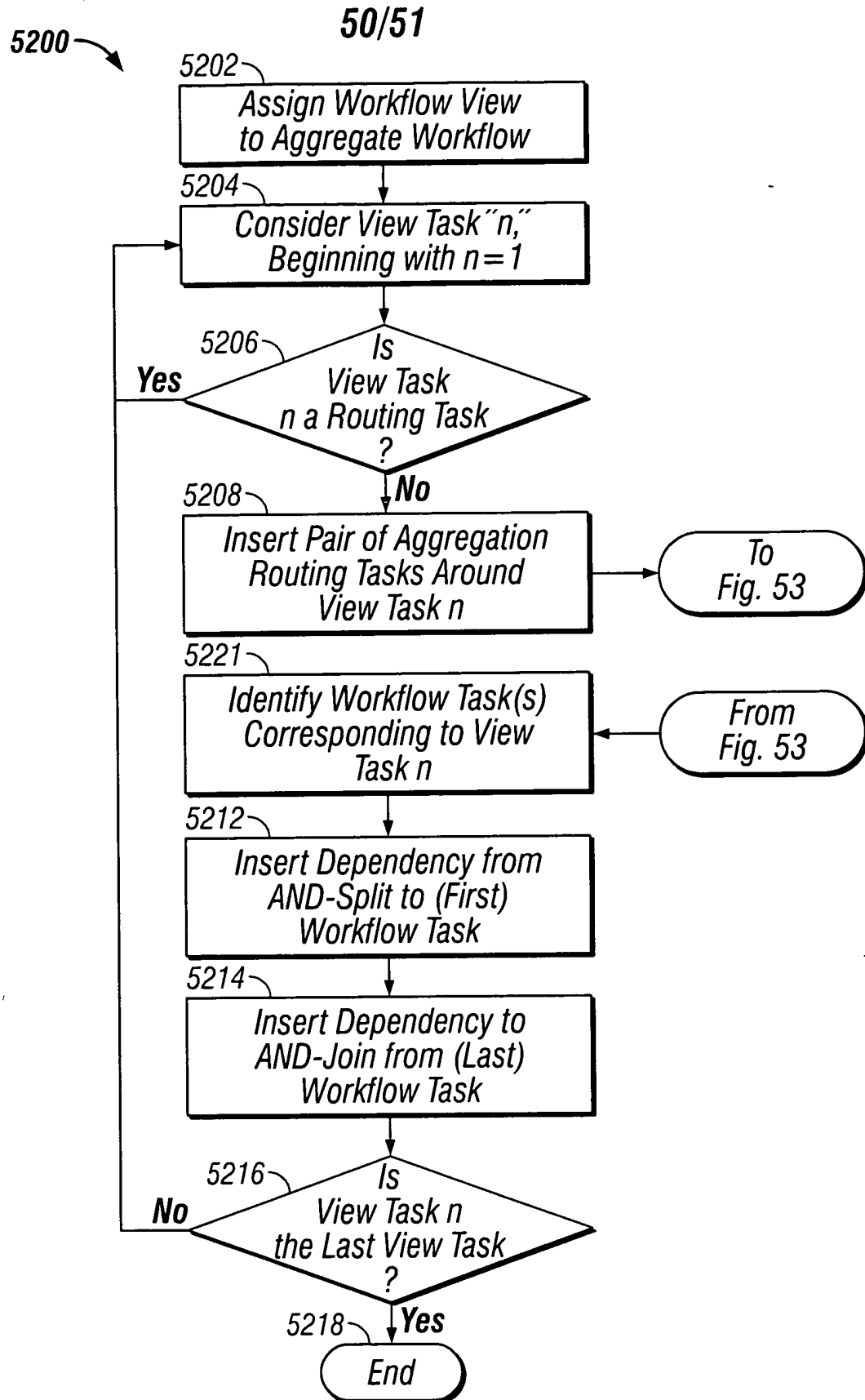


FIG. 51

**FIG. 52**

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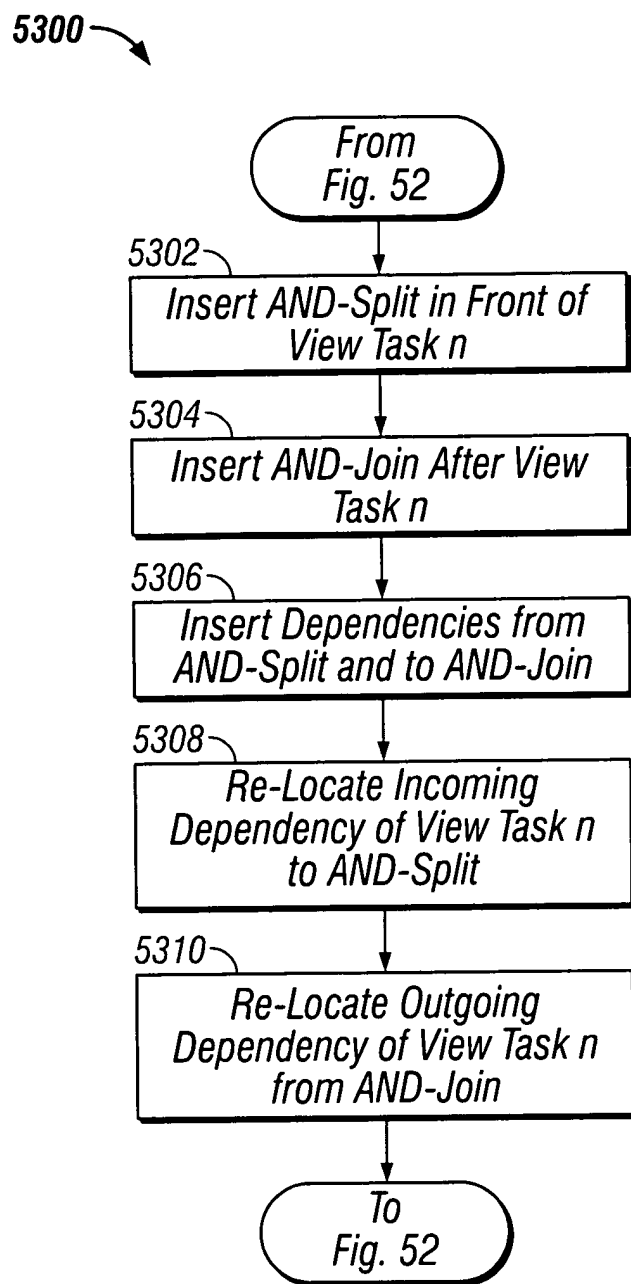


FIG. 53